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AN ANALYSIS OF THE EFFECTS ON THE PROPOSED COAST GUARD
USER FEE ON THE OCEANGOING US MERCHANT MARINE(U) NAVAL
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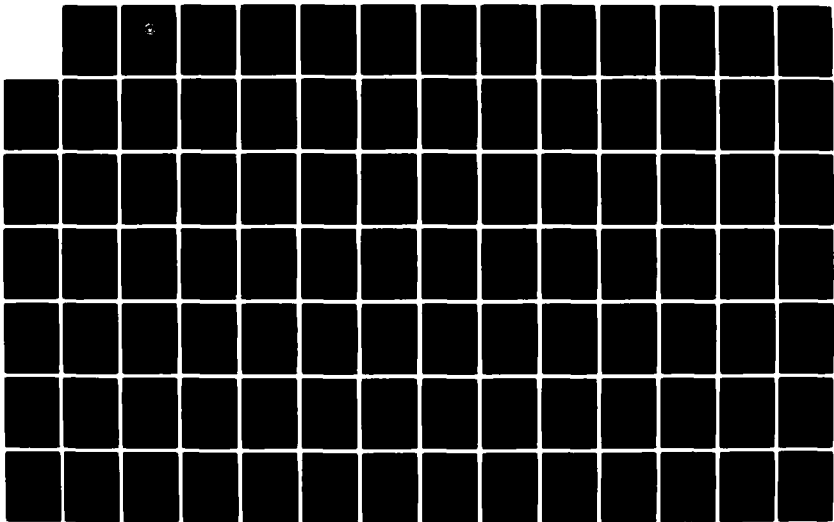
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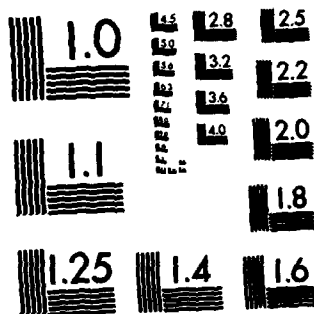
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NAVAL POSTGRADUATE SCHOOL

Monterey, California



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AN ANALYSIS OF THE EFFECTS OF THE
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THE OCEANGOING U.S. MERCHANT MARINE

by

James C. Perry
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June 1982

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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
	AD A122442	
4. TITLE (and Subtitle) An Analysis of the Effects of the Proposed Coast Guard User Fee on the Oceangoing U.S. Merchant Marine		5. TYPE OF REPORT & PERIOD COVERED Master's Thesis; June 1982
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) James C. Perry John T. O'Connor		8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS Naval Postgraduate School Monterey, California 93940		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS Naval Postgraduate School Monterey, California 93940		12. REPORT DATE June 1982
		13. NUMBER OF PAGES 150
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) User Fees Merchant Marine U.S. Coast Guard		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This study is an analysis of the effects the proposed Coast Guard user fee of March 1982 will have on the U.S. Merchant Marine engaged in international trade. The analysis concentrates on the effect the fee will have on the profitability of the firms in the industry. From this analysis, conclusions are drawn as to the effect the fee will have on the ability of firms and ships to remain in		

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An Analysis of the Effects of the Proposed Coast Guard
User Fee on the Oceangoing U.S. Merchant Marine

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Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

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ABSTRACT

This study is an analysis of the effects the proposed Coast Guard user fee of March 1982 will have on the U.S. Merchant Marine engaged in international trade. The analysis concentrates on the effect the fee will have on the profitability of the firms in the industry. From this analysis, conclusions are drawn as to the effect the fee will have on the ability of firms and ships to remain in the industry. A case study approach is used. Background material on U.S. Merchant Marine history, Federal government subsidy programs, and economic theories relevant to ocean shipping are presented and utilized in the analysis studies.

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I. INTRODUCTION

A. THE REAGAN ADMINISTRATION AND USER FEES

Shortly after taking office in January of 1981 the Reagan administration submitted to the Congress a program to revitalize the economy of the United States. Included in this program was a plan to recover the costs of many government services by funding them from user charges rather than from general tax revenues.

The primary purpose of this aspect of the Reagan program is to relieve the general taxpayer of the burden of the costs of services that primarily benefit a small number of individuals and firms. This program also seeks to achieve economic efficiency. Charges to users will create an incentive for them to request services at a level at which benefits exceed or at least equal the cost. In addition, the administration claims the user charge will provide an incentive for the user to monitor the public agency providing the service and encourage it to operate efficiently.

As part of this program the United States Department of Transportation established the policy that its programs should be financed, wherever possible, through charges levied directly on the user or immediate beneficiary of the service. Charges will reflect full Federal costs and will be based on

the extent and character of each individual's or firm's use of the service.

The United States Coast Guard is an agency of the U.S. Department of Transportation. The estimated costs of Coast Guard operations will exceed 1.3 billion dollars in 1982. Almost all of its services are provided to a small segment of the public without charge. These services include licensing, inspection, vessel documentation, operation of aids to navigation, search rescue and towing assistance, ice-breaking, and water pollution monitoring and cleanup, among others.

While the Nebraska farmer, and those like him that do not receive measurable benefits from the aforementioned services, can reasonably be expected to help pay for the Coast Guard's contribution to national defense and law enforcement, it is unreasonable that they should subsidize the costs of services that only a small number of yachtsmen, fishermen and ship owners now enjoy free of charge.

Pursuant to the Administration's policy to limit Federal transportation outlays a proposal, currently being developed, will be submitted by the Coast Guard to the Congress to recover the cost of certain services not related to military or law enforcement missions (i.e. navigation aids, search and rescue operations, icebreaking, ship inspections).

B. PROBLEM

During recent years a great deal of attention has been focused on the condition of the U.S. oceangoing Merchant Marine. Technical publications and journals related to the United States Navy and U.S. maritime industries, the popular press, and television have all presented articles or programs expressing concerns over the ability of the U.S. oceangoing merchant marine to survive as an industry. Concern for the U.S. oceangoing Merchant Marine arises because this industry figures in the security requirements of the nation and is a source of employment to many workers. Interest in the Merchant Marine has also been evident in the Federal Government. In the Forward to the Annual Report of the Maritime Administration for Fiscal Year 1979, Samuel B. Nemirow, then Assistant Secretary of Commerce for Maritime Affairs, expresses this interest:

The period covered in MARAD 1979 has been marked by unprecedented administrative and legislative initiatives to bolster the U.S. maritime industry. . . . Coincidentally (but not too surprisingly) the 1970s ended as they began--with an intensive, far reaching re-evaluation of the U.S. maritime industry.

Concern about the ability to compete is reflected in substantial subsidies to the Merchant Marine from the Federal Government. The subsidies take the form of direct monetary and indirect non-monetary aids. The majority of these Federal aids to the industry have existed for many years. Recent initiatives to bolster the Merchant Marine suggest

this aid was not enough. Based on the long standing practice of the Federal aid to the industry and based on the interest in the nation during the 1970s to bolster the industry, it is appropriate to determine the effects of charging the Merchant Marine a fee for services provided by the U.S. Coast Guard.

C. PURPOSE AND SCOPE OF STUDY

The purpose of this study is to analyze the potential effects of a Coast Guard user fee on the U.S. oceangoing Merchant Marine. The user fee will be based on the costs of services provided to the U.S. oceangoing Merchant Marine by the Coast Guard that are currently funded from general Federal tax revenues.

As indicated, this study deals only with the U.S. ocean-going Merchant Marine that engages in providing shipboard transportation service between the U.S. and foreign ports. All firms in this industry operate United States registered ships and have American crews. This industry is distinct from the U.S. Merchant Marine engaged in coastal trade (transportation between U.S. ports) in that the U.S. ocean-going Merchant Marine must compete with firms operating ships registered in foreign countries and manned by non-U.S. crews. The U.S. Merchant Marine servicing only U.S. ports does not face this foreign competition.

In March 1982, the Coast Guard released a demonstration fee schedule which included proposed charges to be levied on the U.S. Merchant Marine. This demonstration fee schedule is one of the cornerstones of this study. In analyzing the effects of a user charge on the U.S. oceangoing Merchant Marine, this fee schedule will be used. Should a user charge be implemented to recover the cost of Coast Guard operations it is assumed it will not differ materially from this proposal of March 1982.

A study of the effect of charging for government services provided to an industry logically leads to questioning the importance of that industry to the public. This study will not attempt to assess the value of the U.S. oceangoing Merchant Marine to the general public, as it is beyond the scope of the thesis. Also, any future plans to expand or contract the Merchant Marine will be given only passing consideration. This study will focus on estimating the effect of the fee on the firms and ships engaged in the industry as of April 1982.

As previously indicated, the U.S. oceangoing Merchant Marine is a heavily subsidized industry. The analysis in this study will consider the various aid programs in effect as of April 1982. No attempt will be made to recommend changes to the various aid programs as part of this study.

D. RESEARCH METHODOLOGY AND CHAPTER SUMMARIES

This research concentrates on short term profitability of the firms in the industry. From this approach, conclusions will be drawn regarding the ability of the firms to stay in the industry and expected changes as to the number of ships employed in the industry as a result of the proposed Coast Guard user fee. To do this, a case study approach has been selected. Data was collected for the years 1978 through 1980 on eight of the thirteen firms that make up the industry. The firms chosen for case study represent a large cross section of the industry in terms of size, trade, trade routes, types and number of ships, corporate structure, and location of corporate headquarters. For this reason, the case study approach allows us to make meaningful conclusions as to the effect of the fee on all firms in the industry.

The case studies of Chapter VIII are the heart of this research effort. Chapter VIII is a collection of summaries of interviews with company officials and financial data for all the firms selected for case study. In addition, estimated fee costs for each firm are calculated and presented. Estimated fee costs are presented in table format along with other financial data. This allows the reader to develop a feel for the magnitude of the fee. Chapter VII provides a detailed description of the methodology used to develop the case study chapter.

Chapter II provides a short history of the Merchant Marine including the Coast Guard's history of interaction with the Merchant Marine. Chapter III provides a description of the U.S. government's Merchant Marine subsidy program. Chapter IV provides an overview of the U.S. Merchant Marine engaged in international trade. These chapters provide a background in Merchant Marine affairs that is needed to fully understand the case studies. In addition, chapter IV provides evidence that the case studies cover a large cross section of the industry. From this chapter the reader is able to judge the legitimacy of drawing conclusions on the industry as a whole based on this case study approach.

Chapter VI provides a detailed description of the proposed Coast Guard user fee. As indicated earlier, these researchers assume that should a fee be enacted it will be very similar to the March 1982 proposal. For this reason, Chapter VI is a cornerstone of this thesis.

Chapter V provides a description of the ocean shipping industry. In this chapter, theories concerning the economic conditions facing the ship operators are discussed. This discussion concentrates on the market conditions faced by the U.S. ship operators. This chapter provides a vital background needed to perform an analysis of the data and comments provided in chapter VIII.

Chapter IX provides an analysis of the data and comments presented in chapter VIII. The analysis describes trends

observed in the financial data and comments of the case study chapter. Financial data and comments of company officials are contrasted and compared. Background material developed in chapters II, III, and V are used to analyze the data, comments, and trends. The analysis centers around short term profitability of the firms.

From the analysis of short term profitability presented in chapter IX, conclusions are made and described in chapter X. The conclusions deal with the ability of the present firms to remain in business and expected changes to the number of ships in service as a result of the user fee. Chapter X also makes recommendations for further study on questions that are germane to this issue but are beyond the scope of this study.

II. THE MERCHANT MARINE HISTORY

A. INTRODUCTION

This chapter will provide the reader with the main elements of historical background information which are essential to the understanding of the problems faced by the U.S. Merchant Marine today. The interplay between the U.S. Coast Guard and the Merchant Marine is traced to provide an understanding of what has become known as a "traditional relationship".

A fundamental knowledge of the information presented in this chapter is necessary to enable a clear understanding of the organization to which the proposed user fees will apply, and the traditions which may be altered.

B. A BRIEF HISTORY OF THE U.S. MERCHANT MARINE

America's historical development has been heavily influenced by its geography. Her umbilical cord stretched into and across the seas from the first colonization until years after her declaration of independence. Although she is not entirely dependent upon foreign trade today, the United States is by far the world's leading nation in active trading in terms of total imports and exports.

Merchant shipbuilding, as well as trade, flourished in the colonial period. Rich natural resources, human talent,

and the ability to respond to an opportunity for profit pushed the commercial interests of the colonies to the forefront of its consciousness. When the American Revolution came, George Washington's Navy was born of the merchant and fishing vessels of the colonies. The merchant schooner HANNAH was commissioned on September 2, 1775 to raid British shipping. Two days later she returned with the first prize of the war. More ships were commissioned which led to the capturing of many British supply ships containing weapons and ammunition later used to drive the British out of Boston. This refitted merchant fleet had shown that seapower was going to play a very important role if the revolution was going to succeed. The Continental Congress subsequently authorized a host of fishermen and commercial sailors to become privateers and prey on British shipping.

After the Revolution was won, America became one of the major forces in world shipping. To raise revenue and protect the U.S. Merchant Marine as well as the manufacturing industry which had developed during and after the Revolution, Alexander Hamilton, the first Secretary of the Treasury, proposed a system of "Revenue Cutters" to enforce the provisions of the Revenue Act of 1789. On August 4, 1790, ten Revenue cutters were authorized by President Washington. This was the birth of the U.S. Coast Guard.

Citing a desire to ensure the nation's prosperity, the government determined that aid to the U.S. Merchant Marine

should take the following forms: 1) tariffs favoring goods carried in America's ships; 2) prohibition of foreign ships engaging in America's coastal trade; 3) and the reduction of hazards of navigation [Ref. 1: p. 27]. The Lighthouse Service, which later merged with the Revenue Cutter Service to become the U.S. Coast Guard, was created to provide the third form of aid. American shipping was in a period of growth. At the beginning of the year 1790, only 123,893 tons of shipping were under the U.S. flag. By 1792, this total had increased to 411,438 tons, and by 1800 U.S. shipping had grown to 667,107 tons and 89% of all U.S. import and export trade was carried in American vessels. During the following years, the U.S. Merchant Marine growth suffered from the inroads of the Barbary pirates, British and French harassment, and the War of 1812 [Ref. 2: p. 44].

The next 35 years saw a tremendous growth in the use of steam for propulsion. Many of these craft were experimental and dangerous. In the year of 1832 alone, 14% of all the world's existing steamers were destroyed by explosions. In 1838 Congress enacted a law requiring that steamships be inspected by trained men and that these vessels have lifeboats and fire fighting equipment aboard. The first inspectors were appointed by U.S. judges to form the Steamboat Inspection Service as a part of the Department of Commerce. In 1852 the Coast Guard was given the job of seeing that all vessels complied with these laws.

In 1843, U.S. exports exceeded imports for the first time in U.S. history and the launching of the first clipper ship, RAINBOW, signaled the beginning of a new era in shipbuilding. The American shipbuilding industry was very prosperous, selling a great many ships to foreign countries, as well as building for domestic purchasers. Speed was at a premium and American shipbuilders kept improving their designs. In 1847, Congress passed a subsidy program to offset a mail subsidy program given by England to her merchant ships. This subsidy program along with the growing California trade accounted for rapid increases in tonnage. It was in this period that Congress appropriated money for life-saving stations and equipment to be administered by the Coast Guard.

By 1855, the North and South had begun their bickering that would soon lead to the Civil War. This conflict, coupled with a depression in 1861, contributed to a decline of the Merchant Marine. Two technological advances further contributed to the reduction of the size and importance of the shipping industries. The first was the shift from wooden hulled to iron vessels. The cost of U.S. steel was higher than that of European shipbuilding countries resulting in the costs of American ships being up to 75% more than that of the foreign ships. The second was the shift from sail to total steam propulsion. America had concentrated on perfecting sails for long voyages while competing

maritime countries worked on steam which eventually caused the slower sailing vessels to become obsolete. To make matters worse, the federal government turned its attention away from shipping to developing internal communications between the East and West coasts via rail. By 1901, the U.S. Merchant Marine engaged in foreign trade was at one of its lowest points in history, carrying only 9.2 percent of its foreign commerce. After entering the war the U.S. fleet grew to five times the size of the prewar fleet. The government embarked on a program to transfer many of these ships to private ownership after the war. The roots of the current subsidy program can be traced to these years when the government became more entangled in shipping affairs than ever before [Ref. 3: p. 52].

The U.S. had a large, up to date Merchant Marine in the early twenties, but very few new ships were being built. By the middle of the thirties it was becoming obvious that the U.S. Merchant Marine was again becoming non-competitive against foreign vessels as the bulk of its World War I constructed vessels approached the end of their useful lives. Congress enacted the Merchant Marine Act of 1936 to rejuvenate the U.S. Maritime industry and this act remains the backbone of the maritime assistance program of today. This act also established the Maritime Commission which was the forerunner of the present Maritime Administration.

The Second World War saw the majority of the foreign shipping competition destroyed whereas the U.S. Merchant Marine actually quadrupled in size. On December 31, 1946, the U.S. Merchant fleet contained 50.6 percent of the world's ocean-going commercial steam and motor ship tonnage [Ref. 4: p. 4].

During the period just after the war, the U.S. Merchant Marine carried a large part of the world's commerce and a much larger share of U.S. trade than it had since the earliest years of the republic. This heyday was not to last. The U.S. Merchant Marine steadily declined in size until the early 1970s. In 1970, it was down to the seventh largest in the world. The Merchant Marine Act of 1970, an amendment to the Merchant Marine Act of 1936, created large increases in government assistance and expanded the eligibility of recipients of the aid. For some time the industry started an upturn and an air of optimism prevailed, but the aid did not provide any real improvement in the competitive position. Table I depicts the major merchant fleets of the world as of 1 January 1980 and ranks them both by number of ships and by total dead weight tonnage.

The present American Merchant Marine handles less than four percent of the U.S. foreign trade. No other maritime nation carries so little of its own commerce. Table II demonstrates the percentage of U.S. oceanborne foreign cargo carried by U.S. flag vessels from 1970 - 1979. This situation

TABLE I

Major Merchant Fleets of the World--January 1, 1980

<u>Country</u>	<u>No. Ships</u>	<u>Rank #</u>	<u>Dead Wt Tons</u>	<u>Rank Size</u>
Liberia	2,380	3	158,702,000	1
Greece	2,876	1	63,542,000	2
Japan	1,751	5	61,192,000	3
United Kingdom	1,110	6	41,937,000	4
Norway	632	9	39,494,000	5
Panama	2,347	4	35,257,000	6
U.S.S.R.	2,512	2	21,590,000	7
United States (priv)	569	11	20,540,000	8
France	359	17	19,884,000	9
Italy	624	10	18,489,000	10
Spain	506	12	12,656,000	11
Germany (Fed Rep)	502	13	12,485,000	12
Singapore	667	7	12,341,000	13
China (People's Rep)	645	8	9,372,000	14
India	363	16	9,100,000	15
All Others	6,955		114,321,000	
TOTAL	24,798		650,902,000	

(Source: MARAD Annual Report 1980)

is beginning to gain a high priority with hopes of a solution which will increase the U.S. Flag tonnage carried and at the same time reduce the dependence on government subsidy.

TABLE II

U.S. Oceanborne Foreign Trade Tonnage (in millions)

<u>Calendar Year</u>	<u>1973</u>	<u>1975</u>	<u>1977</u>	<u>1979</u>
Liner Total Tons	51.3	44.3	47.8	57.0
Liner U.S. Flag Tons	13.2	13.6	14.4	15.7
Liner U.S. Percent	25.8	30.7	30.2	27.5
Non-Liner Total Tons	281.9	275.3	289.0	342.7
Non-Liner U.S. Flag Tons	4.5	3.8	5.7	3.6
Non-Liner U.S. Percent	1.6	1.4	2.0	1.0
Total Tons	631.6	615.6	775.3	823.1
U.S. Flag Tons	39.9	31.4	34.8	35.0
U.S. Percent of Total	6.3	5.1	4.5	4.2

(Source: MARAD Annual Report 1980)

C. SUMMARY

This chapter has presented a short history reflecting the development of the U.S. Merchant Marine. It has brought forth the many problems faced by the industry and shown that the U.S. Coast Guard has evolved into one of the Merchant Marine's government funded supports. In the next chapter, a summary of the entire federal aid program to the Merchant Marine will be presented to provide the reader with a complete understanding of the industry's financial troubles.

III. GOVERNMENT ASSISTANCE TO THE U.S. MARITIME INDUSTRY

A. INTRODUCTION

This chapter describes the reasoning behind the U.S. Government's perception of need for a Merchant Marine and also its broad expectations. The preceding chapter has discussed the many problems faced by the Merchant Marine. This chapter will present the government's conceived solutions to those problems.

B. THE REASON

In order to attain and maintain certain economic objectives and to ensure supply line support in event the nation's security is challenged, the federal government has adopted as national policy that the United States must have a domestic vessel building industry to furnish boats and ships for our maritime industries, and have its own Merchant Marine capable of carrying a significant percentage of the nation's foreign commerce, and all of its interstate waterborne commerce.

The U.S. maritime industry and particularly shipbuilding and shipping have for a long time been considered an essential part of U.S. defense and economic strategies. The requirement to provide shipping for national defense can be divided into two components. The first is to provide the

necessary shipping capability to move military cargo and the second is to provide the shipping that is necessary to move imports needed for the support of essential elements of the national economy in a time of national emergency. As defined in the Merchant Marine Act of 1936, the economic objective of providing shipping for the development of commerce is defined in terms of economic benefits and includes:

1. The promotion of U.S. foreign trade.
2. The creation of employment for U.S. citizens.
3. A favorable contribution to the U.S. balance of payments.
4. The assurance of fair and reasonable freight rates for U.S. imports and exports.

The traditional argument for government assistance has been the need to equalize the costs to permit the U.S. Maritime industry to compete effectively with the foreign flag industry which has presumably lower costs. The U.S. Congress enacted the Merchant Marine Act of 1936 to assure that the aforementioned objectives were met.

Title I of the Act summarizes the policy:

It is necessary for the national defense and development of its foreign and domestic commerce that the United States shall have a Merchant Marine (a) sufficient to carry its domestic water-borne commerce and a substantial portion of the waterborne export and import foreign commerce of the United States and to provide shipping service essential for maintaining the flow of such domestic and foreign water-borne commerce at all times, (b) capable of serving as a naval and military auxiliary in time of war or national emergency, (c) owned and operated under the United States flag by citizens of the United States insofar as may be practical, (d) composed of the best equipped, safest, and most suitable types of vessels, constructed in

the United States and manned with a trained and efficient citizen personnel and (e) supplemented by efficient facilities for shipbuilding and ship repair. [Ref. 5: p. 12]

This act and its many later amendments foster the U.S. Merchant Marine in a variety of different areas. The government has the choice of a broad selection of assistance tools to use in providing aid to the maritime industries if and whenever it deems necessary. Jantscher [Ref. 6: p. 10] categorizes this aid as either fiscal or non-fiscal. Fiscal aid refers to any form of assistance that is given through monetary transfers between the government and industry. Non-fiscal aid refers to assistance given through the government's ability to legislate regulation. The U.S. program for maritime assistance includes both.

C. FISCAL AID PROGRAMS

Fiscal aid programs are administered through the use of the government's spending and taxation powers. These programs take many forms but basically provide aid through loans, subsidies, tax relief, or discriminatory taxes levied upon foreign shipping on the goods which they bring in.

1. The Operating Differential Subsidy (ODS)

The First U.S. ODS came with the Merchant Marine Act of 1928, which provided public subsidies to private shipping lines through the award of lucrative mail contracts. This program failed primarily because contracts were awarded without regard to the needs of the U.S. shippers or the

Postal Service. There were cries of scandal when U.S. Shipping Board members were identified closely with the operators receiving the extravagant awards. This experience inspired the careful study and investigation that preceded enactment of the Merchant Marine Act of 1936.

In general, the present ODS program seeks to equalize the disparity in operating costs between those of American ships and their foreign competitors with respect to the officers' and crews' wages, insurance, maintenance, and repairs not compensated by insurance. The law requires that in order to be eligible for ODS the carrier must perform a service that the U.S. Maritime Administration determines to be "essential" in U.S. foreign commerce, and they must use American built vessels that are registered under the U.S. flag and crewed by U.S. citizens. The act provides that each contractor be paid an amount not to exceed the excess of the fair and reasonable cost of these items over the estimated costs of the same items if the contractor's vessels were operated under the flag of a credible foreign competitor. Most problems associated with this program derive from the lack of guidance in determining which costs are fair and reasonable, and how the competitor's costs are to be established. The Maritime Administration determines the operating costs of each contractor's main foreign competitors as best it can, attempting to compare each particular expense item. The difference between each competitor's cost and the

contractor's cost is computed. A weighted average is then computed reflecting the importance of each competitor. The final weighted difference is expressed as a fraction of the contractor's own expense which determines the subsidy rate for each item. The amount of subsidy that is due the operator is then calculated as the product of the rate and the operator's expenses. This calculation is repeated for each subsidizable item.

The amounts of money spent in the past for operating differential subsidies are a matter of public record obtainable through the Maritime Administration. Published figures show that expenditure from 1955 to 1980 have well exceeded \$5.5 billion in ODS alone (see Table III). Currently ODS is costing in the neighborhood of \$350,000,000 per year. The total cost of the program, since its inception in 1936, is approximately 13.8 billion dollars when converted to 1980 dollar values using the GNP deflator.

2. The Construction Differential Subsidy (CDS)

As with the operating differential subsidy, "differential" is the key word in defining the purpose of this financial aid program to shipowners for the purchase of new vessels. CDS can be defined as the difference in cost between the estimated cost to construct a ship in a foreign shipyard and the cost of the same ship constructed in a U.S. shipyard. This subsidy program is considered necessary to avoid further decline of the U.S. Merchant Marine, but also

TABLE III

ODS Outlays--January 1, 1937 to September 30, 1980

<u>Calendar Year</u>	<u>ODS Subsidies</u>
1937-1955	\$682,457,954
1956-1960	751,430,098
1961	170,884,261
1962	179,727,400
1963	189,119,876
1964	220,334,818
1965	183,913,236
1966	202,734,069
1967	220,579,702
1968	222,862,970
1969	233,201,233
1970	232,686,761
1971	203,401,051
1972	192,512,930
1973	220,831,202
1974	228,590,811
1975	264,993,597
1976	283,679,736
1977	300,272,673
1978	292,991,393
1979	276,213,227
1980	313,139,000

(Source: MARAD Annual Report 1980)

of the U.S. shipbuilding industry. Presumably it ensures a degree of national self-sufficiency in supporting capital acquisitions of the U.S. maritime industries. CDS may also

be paid to aid in the reconstruction and reconditioning of existing ships if it is determined that the project constitutes an exceptional case. All applications are received by the Maritime Administration where they are analyzed and a recommendation is then submitted to the Maritime Subsidy Board for consideration and action. The Merchant Marine Act of 1936 defines the requirements that a prospective CDS applicant must meet under its Title V section. The following is an abbreviated group of eligibility requirements for CDS:

1. The prospective purchaser must be a citizen of the United States.
2. The ship must be built for use in the foreign commerce of the United States.
3. The shipyard which will construct the ship must be located in one of the 50 states or Puerto Rico.
4. The prospective purchaser must possess the financial and other qualifications necessary for the acquisition, operation, and maintenance of the proposed new ship.
5. The ship to be constructed must meet the requirements of the foreign commerce of the United States, be capable of aiding in the promotion and development of such commerce, and be suitable for use by the United States for national defense or military purposes in times of national emergency.
6. The owner must agree to the following restrictions placed on ships built with the aid of CDS:
 - a) A ship must be documented under the laws of the U.S. for 25 years (20 years for liquid bulk carriers).
 - b) All members of the crew must be citizens of the U.S.

- c) The ship must be operated in either the U.S. to foreign commerce or foreign to foreign commerce, or else a portion of the CDS will be required to be refunded.
- d) If the U.S. purchases or requisitions the vessel, the owner shall be paid the depreciated original construction costs or the scrap value, whichever is greater.

The Maritime Administration gives preferential consideration to those applications that tend to minimize the CDS and to those that will result in the construction of ships having higher transport capability and productivity. Any required or recommended national defense features incorporated into the construction of a proposed CDS commercial ship solely to enhance its value to the U.S. government, will be completely paid for by the United States government. All designs to be considered for CDS therefore must be submitted first to the Department of the Navy for review and approval as to adaptability for military auxiliary use prior to any CDS funds being granted.

The allowable percentage of total costs for the CDS program has fluctuated in the past from 33 1/3% to 55% until 1976, when a maximum was set at 50% of the total construction costs. The Maritime Administration however, has targeted expected subsidy goals for each year since 1976 to be slightly but increasingly less than the 50% ceiling and has been very successful in achieving these productivity goals. Although this program is very expensive, it has achieved a fair amount of success. According to Kiss (1977) [Ref. 4:

p. 11], each dollar of the CDS program has, in the past, exerted considerable leverage in generating from three to over six dollars of ship construction. In other words, \$1 million in CDS could result in ship construction contracts worth from \$3 to \$6 million for U.S. shipyards. Table IV demonstrates the total in CDS outlays since its inception in 1936 until 1980. The total cost of the program, since its inception in 1936, is approximately 6.58 billion dollars when converted to 1980 dollar value using the GNP deflator.

3. Tax Subsidies

In contrast with the outright expenditures of the direct maritime subsidies described previously, the tax subsidies are given in the form of interest-free loans. In this program, the U.S. government foregoes collection of taxes on a part or all of the shipowners' earnings and grants the owners the use of this money provided they invest it in replacement equipment and vessels. These deferred taxes will have to be converted into capital equipment eventually, but no interest will be charged.

The 1970 amendments to the Merchant Marine Act of 1936 authorized United States shipowners to establish "capital construction funds" (CCF) for the purpose of accumulating the large quantities of capital necessary for the modernization and expansion of the U.S. maritime industry. Such funds may be created by any U.S. citizen who owns or leases vessels built and registered in the United States and operating in

TABLE IV

CDS Outlays--1936 to 1980

<u>Fiscal Year</u>	<u>CDS Subsidies</u>
1936-1955	\$248,320,942
1956-1960	129,806,005
1961	100,145,654
1962	134,552,647
1963	89,235,895
1964	76,608,323
1965	86,096,872
1966	69,466,510
1967	80,155,452
1968	95,989,586
1969	93,952,849
1970	73,528,904
1971	107,637,353
1972	111,950,403
1973	168,183,937
1974	185,060,501
1975	237,895,092
1976	233,826,424
1977	203,479,571
1978	148,690,842
1979	198,518,437
1980	262,727,122

(Source: MARAD Annual Report 1980)

U.S. commerce or the fisheries of the United States. According to Jantscher (1973) [Ref. 6: p. 56], all the earnings of such vessels may be deposited in the fund. There are

scarcely any restrictions on who may create these funds and what vessel's earnings may be deposited in them. The only ocean trade to which restrictions are applied as far as using the CCF is the coastwise trade. Although owners of coastwise trade ships can deposit their receipts in CCF's, they cannot use those moneys to build new vessels for operation in that trade. However, they are able to use the funds to build vessels for operation of non-contiguous state or foreign trade.

The statute directs that three accounts should be maintained in each CCF: a capital account, a capital gains account, and an ordinary income account. These accounts are simply a means of segregating tax paid deposits, tax deferred deposits of capital gains, and tax deferred deposits of ordinary income. Deposits that are representative of amounts which would not be taxed, such as depreciation, are credited to the capital account. If the deposit is representative of an amount which would otherwise be taxed at an ordinary income rate, it is credited to the ordinary income account. The most important distinction is between tax paid and tax deferred deposits, since it is only through the latter that a subsidy is given. The taxes are eventually recovered on tax deferred deposits by a reduction in the depreciable base of new vessels bought with this money, but the payment of tax can still be put off by reinvesting the

new vessel's earnings in the owner's capital construction fund.

To measure the costs of the maritime tax subsidies raises peculiar problems, stemming from the form in which they are given. Because these subsidies are given in the form of tax deferral rather than tax exemption, the cost depends on the length of time the taxes are deferred and what discount rate is used to calculate present values. In the wake of double digit inflation rates of the past several years, it is quite obvious that this fiscal aid program is of considerable benefit to the maritime industries at a substantial cost to the government.

The maritime industries are also eligible for investment tax credits like all U.S. taxpayers, however, credits are disallowed if the investment is purchased with tax deferred funds. This ruling has been challenged by the maritime industry but has not been ruled upon to date.

4. Discriminatory Duty Taxes

This form of fiscal instrument may be used to aid a nation's maritime industry by being levied upon foreign vessels or the cargo carried in their holds. When these taxes are imposed at prohibitive rates, however, they essentially eliminate the foreign competition in the same way as non-fiscal legislated prohibition. The United States Congress years ago enacted a discriminatory duty tax on imported goods carried in foreign flag vessels, but gave the

President authority to refrain from using it against vessels registered in countries that do not discriminate against U.S. flag vessels. This duty has never been imposed. The only form of discriminatory duty tax currently used by the U.S. is levied on the repairs made on U.S. flag vessels in foreign countries, and on the equipment and materials procured abroad for such repairs. This duty is levied at a straight 50% rate and can be avoided only by producing evidence that the work was necessary to secure the immediate safety of the vessel.

5. Federal Ship Financing Program

Established pursuant to Title XI of the Merchant Marine Act of 1936, this program provides for a full credit guarantee by the U.S. Government of debt obligations issued by U.S. citizen shipowners for the purpose of financing or refinancing U.S. flag vessels constructed or reconstructed in U.S. shipyards. The program provides a guarantee of up to 75% of the actual cost of vessels over 5 net tons. The value of this program to the maritime industry is essentially the same as the value of FHA loan guarantees to eligible prospective home buyers. Table V presents a program summary with total liabilities as of September 30, 1980.

D. NON-FISCAL AID PROGRAMS

Non-fiscal maritime aid programs are enacted through federal legislation and then enforced by an assortment of

TABLE V

Federal Ship Financing Guarantees
(liability on September 30, 1980)

<u>Vessel Types</u>	<u>Contracts in Force</u>		<u>Applications</u>	
	<u># Vessels</u>	<u>\$ Amount</u>	<u># Vessels</u>	<u>\$ Amount</u>
Tankers	75	\$1,774,829,229	33	\$ 994,623,750
Cargos	153	1,235,627,333	22	359,694,250
LNGs	16	1,359,281,400	14	1,634,881,000
Bulk	18	317,474,693	8	149,605,000
Total	262	\$4,687,212,655	77	\$3,138,804,000

(Source: MARAD Annual Report 1980)

delegated federal agencies. As with the fiscal programs, the non-fiscal aids cover a fairly wide spectrum and provide support in a variety of ways. The most important of these programs take the form of cabotage laws, cargo preference laws, international bilateral agreements, restriction of national registry to locally built vessels, and finally the services provided by the U.S. Coast Guard and the Army Corps of Engineers.

1. Cabotage Laws

For hundreds of years the sovereign right of all nations to reserve its coastal trade to its own vessels, if it so chooses, has been recognized internationally. Cobotage laws are among the oldest forms of assistance to a nation's maritime industries. The cabotage laws of the United States

since 1807 have required that the U.S. coastwise trade be reserved for vessels documented and built in the United States. Foreign built vessels may be documented under the U.S. flag, but can engage only in U.S. to foreign trade. The Merchant Marine Act of 1920, or Jones Act as it has become known, is the legislation which has become a synonym for all U.S. cabotage laws. This act reestablished the coastal monopoly after World War I. It was felt that the U.S. should open coastal trade to foreign vessels as its own ships were needed to support the war effort. A section of this act also extended the coastwise laws to the nation's territories and possessions. Foreign fishing vessels were forbidden to land their catches in U.S. ports by the Amendment of September 2, 1950, and in 1970, foreign dredges, tugs, and salvage vessels were disallowed from operations in U.S. waters.

It is very difficult to evaluate the costs vs. benefits of the cabotage laws, however it is easy to see that the costs are incurred entirely by the shippers and the buyers of the goods shipped, while the U.S. coastwise maritime industry competes only within its own ranks.

2. Cargo Preference Laws

Preference cargo can be generally defined to be that cargo in which the federal government has a direct property interest, or cargo being transported as a result of a transaction in which the government played a role. Preference

cargos are only a small percentage of this country's foreign trade, but are a lion's share of the cargo shipped in U.S. registered vessels. There are a number of cargo preference laws, some of which are inclusions of acts establishing foreign assistance programs. Three of these are of major importance to the maritime industry:

1. The Military Transportation Act of 1904 directs that all supplies for the U.S. services that move by sea must be carried in vessels owned by the U.S. government or commercial vessels registered in the U.S.

2. The Cargo Preference Act of 1954 amended the Merchant Marine Act of 1936 to enact cargo preference expansion to three more classes of goods: a) goods bought by the government for its own use, b) goods provided by the government for the use of a foreign nation, and c) all goods for which the government funds, grants credits, or has guaranteed the convertibility of foreign currencies. This statute required that whenever such goods are transported by ship, at least 50% of the cargo, by gross tonnage, must be carried in privately owned U.S. flag vessels, provided such vessels are available.

3. The third program of major importance was enacted by Congress as Public Resolution 17 and declared that whenever loans were made by any U.S. government agency to foster the export of U.S. products, those products should be carried exclusively in vessels of U.S. registry.

3. Restriction of National Registry to Locally Built Vessels

This form of aid is not followed in the U.S. except in its coastal trade. Vessels constructed in foreign countries may be registered in the U.S. for purposes of engaging in foreign trade. However, they are not eligible for the O.D.S. program.

4. Bilateral Agreements

These are agreements between two nations concerning the percentage of the total cargo trade to be carried in each country's vessels. The U.S. has entered into agreements of such with a few countries, but to a much lesser extent than most maritime nations. The U.S. has a bilateral agreement with the USSR in which each country is guaranteed 1/3 of the total trade tonnage in their own ships and reserves the remaining 1/3 to be transported by third nation vessels. There have been times when the U.S. has not had enough ships available to carry its full negotiated percentage.

5. U.S.C.G. and Corps of Engineers Services

Both of these organizations have traditionally provided services to the maritime industry in the form of search and rescue, icebreaking, safety inspections and administration, navigation aid (long range and short), harbor dredging and channel clearance, and many others. These services have always been financed by the government as an aid to all users of navigable waters. Both organizations have been directed

by the present administration to propose a user fee system which will be designed to extract the program costs from the users. When these user fee systems have been approved and enacted, these services will no longer be considered in the category of U.S. government aid.

E. SUMMARY

This chapter has presented the government's program to counter the problems faced by the American Merchant Marine in general. The costs are difficult to measure in some of the individual programs, but it can be seen from the accruals shown on Tables III and IV that the government has granted appreciable subsidies to the Merchant Marine from 1936 to the present. The next chapter will present a close examination of who and what makes up the segment of the Merchant Marine engaged in foreign trade.

IV. THE SHIPS AND FIRMS OF THE OCEANGOING U.S. MERCHANT MARINE

A. INTRODUCTION

Up to this point in the thesis, the reader has frequently encountered the term "ocean-going U.S. Merchant Marine". The oceangoing U.S. Merchant Marine has been defined as those firms that own and operate U.S. flag vessels engaged in foreign trade. It is now necessary to introduce to the reader the individual firms that make up the industry. This chapter also provides a brief description of the ships that the firms use. The industry is a capital intensive industry and is difficult to enter. The number of ships engaged in the trade is limited. The number of firms engaged in the trade is even smaller. For this reason, one is quickly able to gain a working knowledge of "Who's Who" in the industry.

This chapter starts out with a description of the number and types of ships engaged in the trade. Following a description of the ships is a discussion of the firms that operate the ships.

B. FLEET PROFILE

According to the 1980 Annual Report of the Maritime Administration, at the end of fiscal year 1980, there were 722 privately owned U.S. flag vessels including 145 ships in the

Great Lakes fleet. These vessels had a record cargo-carrying capacity of 24 million deadweight tons. Of the 577 oceangoing vessels, 45 were in an inactive status leaving only 532 active oceangoing vessels. A little over half of the inactive vessels were laid up and the remainder were temporarily inactive, either awaiting cargos or undergoing repairs. The segment of the fleet actively engaged in foreign trade included 227 vessels of 6.6 million deadweight tons (dwt). Individual ships in the fleet average 36,435 tons, are generally 17 years old, and make an average speed of 17 knots. The employment and general composition of the fleet is shown in Table VI.

TABLE VI

Employment of U.S.-Flag Oceangoing Fleet September 30, 1980

<u>Area of Employment</u>	<u>No.</u>	<u>Deadweight Tons</u>
Foreign Trade***	200	5,029,000
Foreign to Foreign***	27	1,590,000
Domestic Trade***	257	11,259,000
Military Sealift Charter***	48	1,039,000
Other U.S. Agency Operations	19	182,000
Inactive Vessels	312	4,880,000
Total	863	23,979,000

***Component of active U.S. Private Oceangoing Fleet.

(Source: MARAD Annual Report 1980)

Within each vessel category there are scores of different classes of ships. A discussion of each ship class is beyond

the scope of this paper. The type of ship is based on the method in which cargo is stored. Within the freighter category, there are two basic types that bear mentioning. The two types are breakbulk ships and containerships. The breakbulk ship in laymen's terms is a typical freighter. Cargo is brought aboard the ship and stowed in the hold. Considerable effort and expense is required to properly stow the cargo. In most situations, it takes a week to ten days to unload and load a ship. When carrying cargo to modern ports, the breakbulk freighter is not an efficient way to carry cargo. The container vessels are much more efficient as described below. The breakbulk vessel is effective however, when carrying cargo to ports where large modern facilities are not available. In this case, the ship's cargo handling gear can be used to load and off load the ship. For this reason, the breakbulk ship is often attractive from a military perspective.

Within the container type there are three major subdivisions. The subdivisions are the Lighter Aboard Ship (LASH), the Roll-On-Roll-Off (RO/RO), and the Lift-On-Lift-Off (LO/LO) vessels. For the containerships, cargo is packed into freight containers that are brought aboard the ship. In the case of the LASH ships, the containers are barges that are actually lifted aboard the ship. For RO/RO ships, cargo is in anything that can be rolled or driven aboard, but most often found in the form of structurally reinforced

truck type trailers. The trailers are actually hauled aboard the ship by a truck. LO/LO ships store truck type trailers on board with the wheels removed. A large special crane is needed to lift the trailers aboard the ship. Trailers are stowed in the holds of the ships and on the decks.

The principal advantage of container ships is the speed in which cargo can be moved and, with certain types of containers, the ability to convert the containers into overland transportation vehicles. A LO/LO ship alongside a modern facility designed to accommodate it can be off-loaded, re-loaded and underway in less than 48 hours. RO/RO and LASH vessels enjoy a similar advantage over conventional break-bulk vessels. Except for the LASH vessel however, RO/RO and LO/LO vessels are at somewhat of a disadvantage in that they need specialized shore side equipment to load and off load. For military purposes, this creates a problem. A military operation is not guaranteed to be conducted at a modern port facility. Since national security and the needs of the military are frequently cited as a reason for subsidizing the Merchant Marine, this aspect of ship configuration must be considered. LASH vessels need no special equipment to conduct loading operations. The vessels carry a large crane that is designed to pick up the barges carried aboard the ship. As long as tugs are available, LASH vessels can off load and load cargo at anchor if necessary.

TABLE VII

U.S. Oceangoing Merchant Marine--September 30, 1980

	<u>Private Owned</u>		<u>Government Owned</u>		<u>Total</u>	
	<u>Ships</u>	<u>DWT</u>	<u>Ships</u>	<u>DWT</u>	<u>Ships</u>	<u>DWT</u>
Combo Pax/Cargo	5	45	5	39	10	84
Freighters	103	1,406	10	83	113	1,489
Bulk Carriers	15	484	0	0	15	484
Tankers	249	13,147	2	21	251	13,168
Intermodal	142	2,929	2	39	144	2,969
Tug/Barge	9	260	0	0	9	260
LNG	9	646	0	0	9	646
Inactive Fleet	45	2,106	267	2,774	312	4,880
TOTAL U.S. FLAG	577	21,023	286	2,956	863	23,979

(Source: MARAD Annual Report 1980)

There are approximately 20 firms that operate U.S. flag vessels engaged in foreign trade. Eighteen of these firms receive operating-differential subsidies from the Maritime Administration. Table VIII is a listing of the firms and the trades they are engaged in. Most of the firms have been in business for over fifty years although some of the current names are less than 20 years old. Firms operate either subsidized or unsubsidized vessels.

The number of firms engaged in the trade has steadily declined since the end of World War II. The decline is due to many factors and not necessarily the result of lack of business. Many of the routes once serviced by firms no longer in

TABLE VIII

Firms Operating U.S. Flag Vessels

<u>Name of Firm</u>	<u>Receiving ODS</u>	<u>Type Trade</u>
American President Lines Ltd.	yes	Liner
Delta Steamship Lines Inc.	yes	Liner
Farrell Lines Inc.	yes	Liner
Lykes Bros. Steamship Co.	yes	Liner
Moore-McCormack Lines Inc.	yes	Liner
Prudential Lines Inc.	yes	Liner
Waterman Steamship Corp.	yes	Liner
Aeron Marine Shipping Co.*	yes	Bulk
American Shipping Co.*	yes	Bulk
Aquarius Marine Co.*	yes	Bulk
Aries Marine Shipping Co.*	yes	Bulk
Atlas Marine Shipping Co.*	yes	Bulk
Atlas Marine Co.*	yes	Bulk
Chestnut Shipping Co.**	yes	Bulk
Margate Shipping Co.**	yes	Bulk
Moore-McCormack Bulk Transport	yes	Bulk
Pacific Shipping Co.*	yes	Bulk
Worth Oil Transport Co.	yes	Bulk
Sea-Land Services	no	Liner
United States Lines Inc.	no	Liner

*Berger Group Subsidiary

**Keystone Shipping Subsidiary

(Source: MARAD Annual Report 1980)

business are now serviced by one of the firms that was able to survive in the trade. The one exception to this is the passenger trade. The advent of overseas airline service marked the end of passenger liner service. Most of the

operators of U.S. flag vessels also are the owners of the vessels. Many of the steamship companies are subsidiaries of other U.S. corporations.

V. THE OCEAN SHIPPING MARKETPLACE

A. INTRODUCTION

An analysis of the effects of the proposed Coast Guard user fee must consider the possibility of firms in the industry passing the fee on to customers. In order to consider this question it is necessary to examine the market structure of the industry. The first three sections of this chapter describe the world-wide ocean shipping marketplace. This discussion provides the necessary background to consider those sectors of the industry serviced by the U.S. Merchant Marine. Since U.S. flag vessels receive numerous subsidies from the U.S. government, the U.S. Merchant Marine faces certain market conditions not common to world wide shipping. The discussion of the industry structure begins with a description of the various types of ocean shipping service.

B. OCEAN SHIPPING SERVICE

There are basically three types of ocean shipping service available. These are: 1) liner service; 2) charter service; and 3) industrial service.

Liner operators are common carriers that operate along specific trade routes at regular intervals. Charter service or "tramp" service provides shipping "anywhere cargo needs to go." Shippers utilizing charter service usually

have an entire shipload of cargo to move. Industrial service refers to a situation where a company engaged in another industry also operates its own ships. The most common example of this is oil companies that own and operate a fleet of tankers. Each type of service is designed to meet specific needs and faces different market conditions.

Sections C and D of this chapter describe the market conditions for charter and liner service. Further discussion of industrial service is not provided. The explanation of this type of service provided in the preceding paragraph is a sufficient discussion of this form of ocean shipping.

C. CHARTER SERVICE

Shippers utilize charter service for the following reasons:

1. For cargos greater than 5000 tons it is often difficult to secure space on a liner.
2. Liner service is associated with higher shipping rates.
3. Liners don't necessarily service desired ports.
4. The charter vessel can provide direct service.
5. Liner operators occasionally charter to meet peak demands.
6. Charter service relieves the shipper of the need to invest in ships.
7. Nature of the cargo. Coal, bulk cement, iron ore, bauxite, and all petroleum products moving in ship load lots are typical of the commodities not susceptible to liner-type movement. [Ref. 3: p. 77]

The market place for charter service demonstrates all of the characteristics of a perfectly competitive industry. Because of the international nature of ocean shipping, regulation is at a minimum. Rates for charter service fluctuate from hour to hour. Because the supply of ships is not easily changed in response to world shipping needs, charter rates can soar or plunge wildly in response to demand.

There are three types of contracts governing ships operated under charter. Each contract imposes different obligations upon the contracting parties. The three basic types of contracts are as follows:

1. Voyage charter
2. Time charter
3. Bareboat charter

In voyage and time charter, the owner continues to maintain, crew, and operate the vessel. Service is provided to the charterer of a voyage on time basis as the name implies. For bareboat chartering, the charterer actually takes control of the vessel similar to the way an individual rents an automobile. The charterer provides the crew, operates the vessel, and provides limited maintenance in accordance with the charter agreement.

D. LINER SERVICE

The introduction of the steam engine into ocean shipping in the mid-nineteenth century allowed ships to provide fast

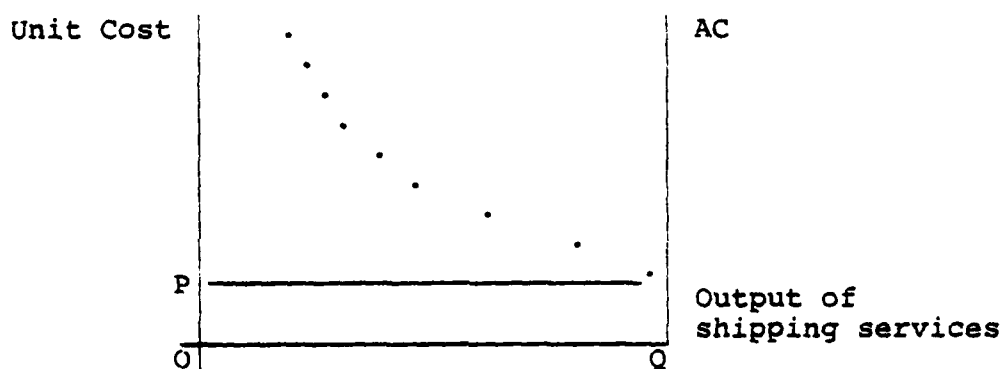
regular service along certain trade routes. This new technology was the basis for liner service as it is known today. Liner service quickly became very popular with many shippers. Although liners commanded top freight rates, they provided many advantages that more than offset the additional costs.

Most noteworthy of the advantages provided by liner service is it allowed firms to keep smaller inventories. Smaller inventories backed up by fast regular transportation provided many cost savings. These inventory cost savings are one reason why liner service remains popular today.

Ship owners have long known that most of the costs associated with operating a ship are fixed costs. This situation requires the ship owner to allocate costs in setting his shipping rates. The introduction of the steamship accentuated this problem as fuel costs increased the already high level of fixed costs. It costs almost the same for a ship to sail between two ports whether it is empty or full. This same situation exists today. As can be observed in Table IX, average shipping cost per unit of output (AC) falls sharply as output increases from zero until at an output of OQ units AC rises vertically. At this point the capacity of the vessel has been reached and further shipping service can only be achieved at the cost of providing another ship. OP is the lowest price per unit that can be

charged for an assumed homogeneous cargo that will allow the operator to recover costs. At any price below OP the vessel cannot be continued in operation beyond a short term regardless of the proportion of capacity utilized. [Ref. 7: p. 88]

TABLE IX
Theoretical Cost Structure of Ship Operation



(Source: Shipping Conferences)

The only variable costs associated with shipping are those related to cargo handling. An empty ship will have no cargo handling costs whereas a full ship will have substantial cargo handling costs. In addition some cargos are more fragile than others and therefore require different handling that varies in cost. Only 10-15% of ship operating costs are associated with cargo handling.

Since most costs are fixed costs, the ship owner is faced with the problem in allocating these costs when setting his shipping rates. This problem became a bigger concern

with the introduction of the liner as fuel and regular schedules added to fixed costs. Steamship companies quickly found that the only practical way to allocate costs was to base freight rates primarily on cargo value. The more valuable the cargo, the higher the shipping charge it would bear.

The advances in marine technology that produced steamships, and introduced liner service also made larger ships possible. Demand for liner service produced more ships. It was soon learned that demand for liner service was cyclical. By the 1870's a decline in the demand for shipping resulted in more ships than cargo. As a result of this excess capacity, rates for liner service declined dramatically. Excess capacity, high fixed costs, and the international nature of the industry provided an ideal climate for this situation. It soon became apparent that all but the very strong would be forced to leave the industry. Because of the large amounts of capital required to enter the industry, it was also evident that the industry would not recover.

In an attempt to avoid losses, ship owners organized into cartels called conferences. The first conference was established on the Great Britain-Calcutta trade route in 1875. Other conferences developed as the result of the success of the first conference. Today there are some 360 conferences throughout the world with over 100 serving the U.S. trades. [Ref. 8: p. 112]

Conferences set shipping rates and control entrance into the liner trades. Shippers utilizing conference vessels enter into tying arrangements with the conference and receive discounts for shipping with conference vessels. Firms violating tying arrangements are penalized. The penalty in the U.S. for violation of the tying arrangement is payment to the conference the shipping rate less actual cost of handling the consignment. Conference members who undercut freight rates are also penalized.

Because of the problems with allocating the high fixed costs associated with liner operations, conferences practice price differentiation. Under this practice freight rates are set to a large extent based on the value of the cargos being carried. Rates also vary depending on whether the ship is headed "outward" or "homeward". Freight rates are developed for thousands of commodities.

Microeconomic principles indicate that the cartel leads to some degree of exercise of market power. For shipping conferences, however, many characteristics of a monopoly are present but strong forces exist that limit their monopolistic powers. To understand the limitations on conference power it is necessary to reexamine the problem of allocating fixed costs and the nature of the cargo being handled.

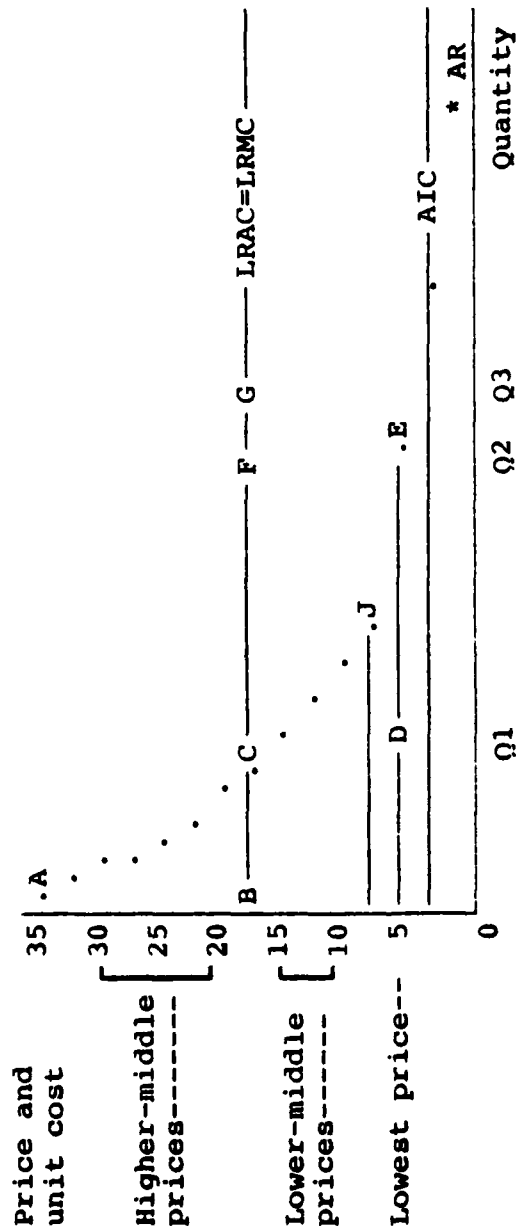
As noted earlier in this section, freight rates are largely dependent on the value of the commodity being shipped. High value items easily accept high freight rates.

Rates might be ten times higher than the freight rate if fixed costs were allocated on the basis of cubic cargo, the standard measure used in shipping. Low value items on the other hand cannot bear the fixed costs of shipping if allocated based on cubic cargo. In the middle, there is a broad band of commodities where the freight rates capable of being absorbed are closer to fixed costs allocated based on cubic cargo. Unfortunately for the ship operator, there is not enough high and medium value cargo to consistently fill the ship. As a result, liner operators must carry a wide spectrum of cargo. The only way to do this is through price differentiation. [Ref. 3: p. 63]

For high value cargo, liners face competition from the air freight operators. At the lower end of the scale, cargo consignments in ship load lots are easier to come by. For this reason competition from charter service becomes a significant factor. Table X is a demand curve for liner service. The elasticity of various cargo to freight rates is demonstrated. As can be observed, shippers of medium value cargo have less flexibility in shipping. Their demand for ocean shipping is less elastic.

As was demonstrated, conferences are limited in their monopoly power by air transportation and charter service. Other factors that control conference members are the remaining members, shippers and governments. In order to prevent members from leaving the conference to undercut

TABLE X
Demand Curve for Liner Service



Key: AR, average revenue, demand curve (approximation)
AIC, average incremental cost
LRAC, long run average cost
LRMC, long run marginal cost

Note: The demand curve in this industry and market is not smooth, continuous and single valued. Under conditions of perfect price differentiation the marginal revenue curve would be coterminous with the average revenue curve.

(Source: Shipping Conferences p. 99)

conference prices, freight rates have to approximate those that would develop if there was perfect competition. Shippers also are able to limit the conference monopoly power. As indicated, shippers of low value cargo often can turn to charter service if liner prices are not controlled. In addition, shippers moving that broad band of cargo best suited for the liner, have been known to form cooperatives to provide ocean transportation service in response to high conference prices [Ref. 7: p. 107]. Although this practice has been attempted in the past, cooperatives have rarely been organized in recent times. Finally, most governments of the world monitor the practices of liner conferences. Although regulation is minimal, few governments will allow conferences to damage overseas trade. In the United States, the Federal Maritime Commission (FMC) is the organization of the federal government that monitors ocean shipping. The role of the FMC is to assure that the cartel-like practices of a conference do not violate the exemptions from U.S. anti-trust laws granted to ocean shipping firms. Liner operators therefore do not exercise monopoly power. Conferences do however help operators cover costs and make a profit.

Despite the problems associated with cartels, shipping conferences have managed to survive for over 100 years. Conferences have been generally accepted by ship owners, shippers, and governments. They are viewed as the least of

many other evils. Even the United States, with its penchant for free trade, recognizes the need for shipping conferences. Shipping laws allow within definite limits, exemptions from anti-trust laws for any conferences in U.S. foreign trade. Membership in conferences, by law, must be open to all carriers in the trade covered by the conference.

E. THE U.S. MERCHANT MARINE

The U.S. Merchant Marine, except for short periods following World I and II, has had trouble competing in the ocean shipping market since the days of the clipper ships. The principal reasons for this are higher crew costs, higher costs of U.S. built ships, higher costs associated with operating older ships and higher costs associated with maintaining corporate headquarters in the U.S. Although the U.S. Merchant Marine has higher costs, it offers only marginally greater productivity.

The years after World War II are considered the golden years of the U.S. Merchant Marine. The U.S. fleet enjoyed a competitive advantage in that most other Merchant Marines were at the bottom of the ocean as a result of the war. Ever since World War II, the U.S. Merchant Marine has steadily declined as other countries have rebuilt their fleets. At present, the U.S. flag fleet carries less than 4% of the nation's cargo. As of 1982, the greater part of the U.S. Merchant Marine engaged in foreign trade is able to survive

because of operating-differential subsidies received from the federal government. Outside of the subsidized fleet, there are only a few firms that are able to compete on an unsubsidized basis. These firms are competitive in that they pioneered liner service in container trade on those routes where large amounts of high value cargo are carried. The combination of flexibility of operation and aggressive pursuit of cargo freighted at high rates gives them the ability to compete successfully with the foreign-flag operators on their routes.

1. U.S. Liner Trades

As can be seen in Table XI, the U.S. Merchant Marine is a small factor in the ocean shipping market affecting imports and exports to the U.S. Due to U.S. law, however, the industry is able to bring significant forces to bear on its markets out of proportion to its size.

TABLE XI

United States Merchant Marine Position in World Shipping

Number of Privately Owned Ships	569
Rank by Number of Ships	11
Total Deadweight Tons	20,540,000
Rank by Deadweight Tonnage	8
Total Tons of U.S. Oceanborne Cargo	823,100,000 (1979)
Total U.S. Cargo Carried by U.S. Flag	35,000,000
U.S. Flag Percent of Total	4.2

(Source: Maritime Administration Annual Report 1980)

As explained in chapter III, U.S. law requires that certain cargos be carried aboard U.S. vessels. For U.S. lines this often provides the firm considerable influence in setting rates along the firm's trade routes. Conferences have found it impractical to discriminate among shippers moving the same commodity. The conferences therefore have a single rate for each commodity. If U.S. carriers are dissatisfied with the conference rate they can leave the conference and still retain the preference cargos. Capacity not needed for preference cargos can be used to compete against the conference. Because of this threat, foreign carriers have the tendency to go along with rates sought by U.S. carriers unless the rates are excessively high and threaten to strangle private trade.

Another factor that gives the American liner carrier of preference cargo the power to influence the conference is the elasticity of demand for preference cargos. Preference cargos result from federal government programs such as Food for Peace. According to Jantscher [Ref. 6: p. 63], an organization purchasing an item under such arrangements is less concerned about the price of the item than under normal market conditions. Since the U.S. government is financing the purchase, the purchaser has less incentive to seek the best price available. This attitude carries over into shipping. The shipper of preference cargo is therefore less concerned about shipping costs. This factor makes it easier

for the shipping conference to demand top rates for its services.

Although the American subsidized liner company has the power to influence the market, it by no means exercises monopolistic control. Preference cargos help the American firm but are not the only source of business. As a result, the American firm must consider foreign firms in making pricing decisions.

2. U.S. Tramp Trade

In the tramp trade U.S. vessels are primarily engaged in bulk transport. Cargos are of the type best suited for transport in tankers or other types of bulk carriers. U.S. tramp operators carry preference cargos under P.L. 480 or receive operating-differential subsidies. For preference cargos under P.L. 480, firms are able to command premium rates significantly higher than world rates. These rates allow the operator to make a profit and cover the higher costs of operating U.S. vessels. Vessel profitability is dependent on the availability of preference cargos.

Vessels receiving operating-differential subsidy must compete in the world market for cargos. As explained earlier in this chapter the tramp trade is a perfectly competitive industry. When demand for shipping is high, large profits can be made. Conversely, during shipping downturns, it is frequently not possible to cover costs. [Ref. 9: p. 223]

3. Competition Between U.S. Liner Firms

To this point in this section, the presentation has concentrated on U.S. Merchant Marine and how it deals with world competition. It is now necessary to examine competition within the U.S. liner trade.

The U.S. Maritime Administration only allows one or two subsidized carriers to trade along a subsidized route. On profitable routes however subsidized firms often face competition from unsubsidized U.S. firms. Since unsubsidized firms can carry preference cargos the competition is formidable. Although subsidized operators are normally not allowed on routes that can support an unsubsidized U.S. firm, changes in traffic patterns can create this situation. [Ref. 10]

There is little or no competition in obtaining subsidized trade routes from the U.S. Maritime Administration. Most subsidized carriers have serviced their present routes since the subsidy program began or acquired routes by purchase from firms leaving the industry. During the mid-1970s most subsidized firms re-negotiated their operating-differential subsidy contracts for another twenty year period. During this period there was no competition from other firms seeking to obtain contracts from incumbent firms. For subsidized firms to move to different routes involves extensive hearings at which comments from other firms in the industry are received and considered. The Maritime Administration is

reluctant to approve a change that will adversely affect an established firm.

F. SUMMARY

This chapter has presented a description of the ocean shipping marketplace. The place of U.S. flag vessels in this market was described. Most U.S. vessels engaged in foreign trade are liners. Aided by the conference system and preference cargos, it was shown that liners are generally able to cover costs and make a profit through freight rates. Since the user fee is a cost, the presentation in this chapter points to U.S. liners covering the user fee through higher freight rates.

U.S. vessels engaged in charter or tramp service are almost exclusively bulk carriers. U.S. firms are able to compete in this business due to preference cargos and operating-differential subsidy. Vessels carrying preference cargos cover costs through premium freight rates. Vessels receiving operating-differential subsidies must compete in the world markets for bulk cargos. The world shipping market for these cargos is a perfectly competitive industry. During periods of over capacity vessel operators are unable to cover costs. To absorb increased costs such as the Coast Guard user fee firms must rely on assets, borrowing and revenues to cover costs. Firms that are unable to generate cash to fund the losses that result from the low freight

rates of periods of over capacity are often forced to leave the industry.

This chapter has developed important considerations in analyzing the effect of the Coast Guard user fee on the U.S. Merchant Marine. The next chapter presents the details of the proposed Coast Guard user fees.

VI. THE USER FEE IDEA

A. INTRODUCTION

This chapter presents the mechanics of the development of the user fee program as proposed by the U.S. Coast Guard. The most current fee schedule, which is the basis for the analytic study following this chapter, is also explained.

B. BACKGROUND

The idea to fund federal government services by means of user's fees is not a new one. A fee system has been in use for funding the services provided by the U.S. National Park Service for a number of years. A user fee system has also been developed and is presently operating in conjunction with the towboat and barge industries' usage of the U.S. inland waterways system. The idea to fund those services provided by the U.S. Coast Guard to the maritime community by charging user fees has often been brought forward for the scrutiny of the Congressional Committees on Appropriations since the early 1950s, but for whatever reason has never gone beyond discussion. President Reagan's program for economic recovery has now tasked the Coast Guard with development of a graduated system of fees to be phased in over the next four years.

That the effect of a user fee will be a contribution to inflation is a frequently encountered argument against its use. Literature included in the Coast Guard proposed user fee package maintains, however, that the costs of providing Coast Guard services are present whether financed from general tax revenues or from user charges, and that the increase in cost to the groups who would be paying a user charge is offset by the lesser expenditure required from the U.S. Treasury to finance the cost of the services. It further cites the effect of the user charge to be a shift in the burden of payment from the general U.S. taxpayer to the primary beneficiary of the service being funded, and because the user charge results in a more equitable distribution as well as a more optimal allocation of society's resources, the effect will not be inflationary especially in the long run.

The criterion used by the Coast Guard in evaluating the user fee mechanism was essentially determined through the use of three tests: a) a test of equity, b) a test of economic efficiency, c) and a test of administrative simplicity.

In the test of equity there are three primary questions to be answered: a) Is it fair to recover the costs of providing services from only those who use the services, or should the whole nation share in the expense? b) What is fair in terms of the distribution of the payment burden among the user groups? c) And finally, what is fair in

treatment of private user groups in competition with each other? The Coast Guard maintains the policy that there should be equal treatment unless there are extenuating circumstances and these ideals have been considered foremost in development of the proposed user fee schedules.

The primary question concerned with the test of economic efficiency is: Will the system be able to provide the level of output of goods and services needed at the least cost over a given period of time? It has been said that when services are funded by the nation's taxpayers, there is an incentive for beneficiaries to request the maximum level of service that they are able to obtain without any regard for cost. The Coast Guard maintains the theory that user charges will create an incentive for the beneficiaries of services to limit their requests for services to a level at which the benefits exceed or at least equal the cost. User charges may also provide an incentive for the users to watch that the public agency providing the services is allocating its resources in an efficient manner.

The last test, administrative simplicity, recognizes that there will be costs for collection involved in a user fee system that are not present in the general taxpayer funding. The additional cost must be weighed against the gains in equity and efficiency. Since it is obvious that at some level the administrative burden will reach a point

where it is so high in relation to the fees collected that it would make the system unfeasible.

The Coast Guard has divided its service beneficiaries into several groups and developed proposed fee schedules and collection mechanisms for each. These schedules are all entirely different and since they are only proposals not yet approved, this study will describe only the schedule directed to commercial vessels engaged in foreign trade.

There are two categories of Coast Guard services provided to commercial vessels engaged in foreign trade. The first is for direct services which includes the functions of issuing or renewing vessel documentations, issuing initial vessel admeasurements, and engagement in various marine safety oriented vessel inspections. The proposed demonstration fee schedule for providing these services is summarized in Table XII.

It can readily be observed that the only fees of any major financial consequence are those in the categories of Admeasurement and Initial Inspection. Admeasurement and the Initial Inspections are concerned with newly constructed vessels and are one time only occurrences. The cost of putting a 4000 gross ton ship into operation or delivery by the builder would come to \$109,520. Amortized over five years until the next survey would mean \$22,000 per year (or about \$4,500 per voyage for a ship averaging 5 voyages per year). This cost is going to be more significant to vessels slightly

TABLE XII
Proposed Direct User Fee Charges

	<u>Transaction</u>	<u>Fee</u>
Documentation	Issue Document	\$300
	Endorse/Renew Document	120
	Other Document Transactions	60
Admeasurement	Simplified	\$ 60
	Less than 75 G.T.	480
	75 to 274 G.T.	1,200
	275 to 999 G.T.	3,800
	1,000 to 3,999 G.T.	8,700
	4,000 G.T. and over	15,120
	Non-self propelled	360
Initial Inspection	Less than 300 G.T.	\$20,200
	Over 300 G.T.	90,000
	All barges	13,000
Certification	Less than 300 G.T.	\$1,400
	Over 300 G.T.	4,100
	All barges	800
Drydock Examination	Less than 300 G.T.	\$ 400
	Over 300 G.T.	1,500
	All barges	600

(Source: U.S. Coast Guard Proposed User Fee Package March 1982)

over 4000 gross tons than to the large 30,000 and over gross ton ships, as the fee is not proportional to the ratio of profit capability of the ship.

The collection for direct services would be by the Coast Guard Marine Safety Office handling those services. Collection costs are considered to be negligible. The proposed direct service fees are not going to be included in the

scope of this study as their major impact will be on the U.S. shipbuilding industry.

The second service category provided to commercial vessels engaged in foreign trade is for those indirect services described in chapter I. The fee collection will be based on the gross tonnage of the vessel each time the vessel enters a U.S. port from a foreign port of origin. Each vessel will be subject to the charge only for the first five entries per calendar year. The proposed 1982 fee schedule calls for \$.20 per gross ton for all vessels engaged in U.S./foreign trade including vessels of foreign registry entering U.S. ports. Because the U.S. Customs Service already collects such a fee from vessels engaged in foreign trade, the establishment and administration of such a fee for the Coast Guard indirect services would be relatively simple.

C. SUMMARY

It is the effect of the indirect user fee on the U.S. Merchant Marine engaged in foreign trade that is the major thrust of this thesis. The effect of the user fee will be applied using the case study method as explained in chapter VII with the cases following in chapter VIII.

VII. CASE STUDY METHODOLOGY

A. INTRODUCTION

The purpose of this chapter is to explain the format in which the case studies of chapter VIII are presented. A standard method has been adopted for presenting the cases. This standard format was adopted to allow the reader to quickly get to the heart of the matter and to easily make comparisons between the cases. Although cases are presented in a standard format, care has been taken to ensure that unique characteristics of a firm do not get neglected simply because these characteristics do not fit the mold.

B. SHIPPING COMPANY SELECTION

Eight U.S. flag shipping firms were selected according to the following criteria:

1. That both large and small firms be represented.
2. That both government subsidized and unsubsidized firms be represented.
3. That both liner and bulk carrier firms be represented.
4. That East Coast, West Coast, and Gulf Coast firms be represented.

The reason for this representation was to enable the researchers to look for any particular disparities of impact relative to size of firm, type trade, geographical location, or subsidy factor.

C. METHODOLOGY

The case studies begin with a brief description of the company. Included is a description of some of the products carried by the firm. Tables are presented detailing important aspects of operations. Where available the following data is provided:

1. Description of the company's fleet.
2. Abbreviated income statements and balance sheets for the years 1978 through 1980.
3. Trade routes serviced and duration of operating-differential subsidy contracts (ODS).
4. Operating-differential subsidy accruals through 1980.
5. Number of voyages per year.

A description of the company's fleet and the number of voyages per year is needed to calculate user fee costs. Balance sheet data is needed to assess the likelihood of the firm remaining in the industry. Operating-differential subsidy data illustrates the relative importance of this program to the firm and provides clues as to the degree of competition experienced along the firms' trade routes. Finally, a description of trade routes is provided to assist in assessing the competition the firm must face.

From the data contained in the tables an estimate of total fee expenses for the firm is calculated for 1978 through 1980. The mechanics of the calculation is explained in section C of this chapter. Total fee expense is then applied to selected data in the tables for comparison

purposes. The fee comparisons to be made are described in section D of this chapter.

The case studies include summarized comments of company officials regarding the user fee. Of particular importance are comments regarding the ability of the firm to absorb, or pass on the fee. Comments of company officials were obtained in interviews conducted during the spring of 1982. Section F of this chapter contains a standard set of questions that provided the basis for the interviews. Interviews were conducted in person and via the telephone.

Most of the firms that are the subject of case studies in this thesis are represented by trade associations. The primary purpose of the trade associations is to lobby for U.S. steamship companies. As a part of the case studies, separate sections are included on the views of trade associations regarding the user fee.

The proposed Coast Guard fee is based on the proposed Coast Guard operating budget for 1982. The fee is therefore inadequate for use with 1978 through 1980 data. To solve this problem a price index has been developed to adjust the fee to constant dollars for each year. The mechanics of this index are described in section E of this chapter.

D. CALCULATION OF FEE COSTS

Calculation of annual fee costs for a steamship company is a simple task. Total fee costs for the company is simply

the sum of the fee costs for each individual ship in the company's fleet. The following formula conveniently expresses the fee cost calculations for each ship.

$$TFC = (GT) \times (V) \times (F)$$

where

TFC = total fee cost for a ship per year

F = user fee per gross ton per entry

GT = size of the ship measured in gross tons

V = number of entries at a U.S. port per year.

As explained in chapter II section B, the user fee will only be charged for the first 5 entries at a U.S. port. In this study $V = 5$ in all cases. All of the companies chosen as case study subjects indicated that their ships make at least five entries per year at U.S. ports.

E. APPLICATION OF TOTAL FEE COSTS

A firm experiencing additional costs can do one of three things with these costs. Costs can be:

1. Passed forward to customers in the form of higher prices.
2. Absorbed by the firm.
3. Passed back to suppliers by demanding lower prices for inputs.

As part of the case studies total fee costs will be applied to company income statements. This will provide a feel

for the firm's ability to absorb the fee should this become necessary.

To accomplish this, company revenues, expenses, net income and the operating-differential subsidy are presented in table format. Alongside these items is presented estimated total fee costs expressed as a percentage of each item.

F. PRICE INDEX

The proposed Coast Guard user fee is based on the proposed Coast Guard operating budget for 1982. Obviously the fee cannot be immediately applied to 1978 through 1980 without considering inflation. To deal with this problem a price index must be developed.

There are many different price indices that could be developed to deal with this problem. This study uses an index based on actual Coast Guard operating expenditures for 1978 through 1980. Table XIII shows actual Coast Guard operating expenses for 1978 through 1980 broken down by program activity. It also shows each program activity as a percentage of total activity. Table XIV provided the same information for 1982. It can be observed that the expenditures by program category are very similar for the four years. This is significant as the user fee is heavily dependent on funds expended on programs 1 through 3.

A second important factor in developing the user fee is the number of users over which the operating costs are

TABLE XIII

Coast Guard Operating Expenses 1978 through 1980
(in millions)

Program	1978			1979			1980		
	<u>Dollar Amount</u>	<u>Total Direct Program Costs</u>	<u>Percent of Total Direct Program Costs</u>	<u>Dollar Amount</u>	<u>Total Direct Program Costs</u>	<u>Percent of Total Direct Program Costs</u>	<u>Dollar Amount</u>	<u>Total Direct Program Costs</u>	<u>Percent of Total Direct Program Costs</u>
1. Search and Rescue	254	27.9	28	279	28	26	293	26	
2. Aids to Navigation	244	26.5	26	253	26	24	271	24	
3. Marine Safety	121	13.0	13.0	132	13.0	14.0	159	14.0	
4. Marine Environmental Protection	62	7.0	7.0	69	7.0	8.0	83	8.0	
5. Enforcement of Laws and Treaties	143	15	17	166	17	18.5	203	18.5	
6. Marine Science and Polar Operations	53	6	5	47	5		56		
7. Military Readiness	44	5	4	41	4	4.5	48	4.5	
8. Total Direct Program Costs	921			987			1113		

(Source: Department of Transportation Budget Data)

TABLE XIV

Proposed Coast Guard Operating Expenses 1982
(in millions of dollars)

<u>Program</u>	<u>Dollar Amount</u>	<u>% of Total Direct Program Costs</u>
1. Search and rescue	369	26
2. Aids to navigation	338	24
3. Marine safety	202	14
4. Marine environmental Protection	107	8
5. Enforcement of Laws and Treaties	261	19
6. Marine science and polar operations	72	5
7. Military readiness	62	4
Total direct Program costs:	1411	

(Source: Department of Transportation Budget Data)

allocated. For the purpose of this index a simplifying assumption is made. It is assumed that the total number of users is constant for 1978 through 1982. This assumption would be difficult to verify and is beyond the scope of this thesis.

Based on this price index the user fee is adjusted to constant dollars for each year using the following general formula:

$$F_{19XX} = \frac{OE_{19XX}}{OE_{1982}} \times F_{1982}$$

where

F_{19XX} = fee per gross ton for 1978, 1979 or 1980

OE_{19XX} = actual operating expenditures for 1978
through 1980

F_{1982} = proposed fee per gross ton for 1982

OB = proposed operating budget for 1982.

To illustrate how this formula is utilized the fee for 1980 is calculated as follows:

F_{1980} = fee for 1980

OE_{1980} = 1,113 (in millions of dollars)

F_{1982} = \$.20 per gross ton

OB = 1,411 (in millions of dollars)

$$F_{1980} = \frac{OE_{1980}}{OB} \times F_{1982}$$

$$F_{1980} = \frac{1,113}{1,411} \times .20$$

Similar calculations were performed for 1978 and 1979.
The results are presented in Table XV.

TABLE XV

User Fees for 1978 Through 1980 Adjusted for Inflation

<u>Year</u>	<u>Fee per Gross Ton</u>
1982	\$.20
1980	.17
1979	.15
1978	.15

G. QUESTIONS

To make this study operationally meaningful, company officials, trade associations, and other individuals knowledgeable in the industry were contacted and asked to comment on the proposed Coast Guard user fee. Most of the firms selected for case study were curious. The comments and data supplied added a great deal to the case study. For other firms, financial data was not supplied. Although this lack of data detracted from the case it did not preclude obtaining meaningful results.

Comments were solicited through interviews conducted in person and via telephone interviews. In conducting the interviews, a basic list of questions was developed to guide the discussion. Figure 7.1 is the list of questions addressed to company officials and to representatives of trade associations.

1. Please provide the following data for your fiscal years 1978 through 1980.
 - a. Income statements and balance sheets (including amount of operating differential subsidy if applicable).
 - b. Freight rates.
 - c. The number of times each ship entered the U.S. during the year.
 - d. A description of your fleet including the size of each vessel measured in gross tons.
 - e. A profile of the type of cargo carried.
 - f. A list of your major customers and what they generally ship.
 - g. A profile of your competition.
 - h. The amount of cargo you carried measured in tons.
2. Is there anything unusual in operations from 1978 to 1980 that should be considered in our analysis?
3. Why do your customers ship with you? Why don't they use your competitors?
4. For subsidized firms: Did you experience any competition from other U.S. firms when renewing your operating-differential subsidy contract?
5. For unsubsidized firms: How are you able to compete without a subsidy?
6. What are your prospects for continuing in business over the next 5 to 10 years without the user fee? With the user fee?
7. Should a fee be enacted will you absorb it or pass it on to suppliers, customers or the Federal Maritime Administration (MARAD)?
8. What do you think the competition will do with the user fee?
9. What type of influence does your firm have in setting freight rates along your trade routes?
10. Would the user fee as proposed have an impact on the size of your fleet?
11. A user fee raises costs. An analogous situation may be the rise in the price of fuel during the 1970s. How did your firm handle fuel price increases?

Figure 7.1 Questions Addressed to Company Officials and Trade Associations

VIII. CASE STUDIES

A. INTRODUCTION

This chapter contains case studies on eight firms. In addition the comments of two steamship trade associations are also summarized. Four of the firms receive subsidies under the liner trade program and two of the firms receive subsidies under the bulk trade program. Two of the firms are owned by the same parent organization. The case study firms and the trade association interview summaries are presented in the following order:

<u>Firm</u>	<u>Trade</u>
1. Delta Steamship Lines Inc.	Liner
2. American President Lines Ltd.	Liner
3. Moore-McCormack Lines, Inc.	Liner
4. Lykes Bros. Steamship Co. Inc.	Liner
5. Moore-McCormack Bulk Transport Inc.	Bulk
6. The Berger Group	Bulk
7. Keystone Shipping Co.	Bulk
8. Sea-Land Services Inc.	Liner
9. American Institute of Merchant Shipping	
10. Council of American Flag Ship Operators	

B. DELTA STEAMSHIP LINES INC.

1. Company Background

Delta Steamship Lines Inc. was incorporated in Louisiana in March of 1919 as the Mississippi Shipping Corporation. The present name, Delta Steamship Lines, was adopted on April 23, 1962. All of the firm's outstanding stock is currently held by Holiday Inns Incorporated.

Shipments from the United States consist primarily of industrial chemicals, automobiles and parts, agricultural machinery, industrial equipment, agricultural products, and finished consumer goods. Principal cargos to the United States are ores, machinery parts, steel, coffee, fresh and frozen fruits, and juices.

2. Comments of Company Official

A company official of Delta Lines Inc. was interviewed in April of 1982 at the firm's Washington, D.C. office. Company views regarding the fee and their place in the ocean shipping market place are as follows:

Delta is able to attract customers due to a reputation for fast, reliable service that has been developed over the years. In the South American trade, Delta pioneered a method of shipping bananas that substantially cut loss and spoilage. Delta also attracts many customers in that it is the only carrier offering LASH service on some South American trade routes. Some U.S. shippers choose Delta because it is the only U.S. firm serving ports along its trade routes.

These shippers have a policy of using U.S. carriers when possible. Finally Delta is a member of the conferences established on its trade routes. For this reason, Delta's rates are the same as other liners competing with Delta.

Delta is able to exercise considerable influence along its trade routes serving South America for two basic reasons. First, South American governments have developed pooling arrangements which require that most cargo be shared between U.S. and South American carriers. Third flag carriers are allowed to operate along these routes but are allotted a smaller share of the cargo. As a result, the conferences in this area work very well. Secondly, Delta operates most of the tonnage along its trade routes. As one of the larger operators, it is able to exert significant influence within the conference.

Delta also services West Africa. The conferences in this trade are weak and competition is fierce, often approaching the cutthroat competition common to the charter business. At present, the West Africa trade is a poor performer for Delta. Management is speculating however, that this conference situation will improve and the trade will become profitable in the near future.

Delta Lines is a profitable firm and expects to stay in business for many years to come. The company has a capital budget plan that calls for the replacement of ships as

they reach the end of their service life. The years 1978 through 1980 were not typical years for Delta. In 1978 and 1979, profits were off due to the acquisition of the vessels and trade routes of the former Grace Line. The year 1980 was an unusually good year. On average, the firm expects net profits to be in the 25-30 million dollar range.

Increased costs such as user fees must be either absorbed by the steamship company or passed on to the customer. U.S. steamship companies are unable to pass costs on to suppliers. It is doubtful if the user fee could be passed on to the federal government in the form of higher subsidies.

Steamship firms have three primary suppliers. These are labor unions, shipyards, and oil companies. It is well established that steamship companies operating U.S. vessels cannot pass increased costs to U.S. labor unions or U.S. shipyards. These suppliers are the primary reasons U.S. flag operators require subsidies. In addition, the shipping industry is unable to significantly affect oil prices. Ship owners have had to deal with spiraling oil prices as have other industries.

As explained in chapter III, operating differential subsidies are only paid for differences in costs such as wages. The user fee would not qualify since it is applied to all vessels. Even if foreign governments paid the user fee for its ships, it is doubtful that U.S. vessel subsidies would be raised. The Reagan administration is opposed to

subsidies and is carefully examining the current subsidy practices.

The Delta official indicated that the Conferences would eventually pass the fee on to customers through higher rates. Estimates were made of total fee costs by the Delta official. These estimates indicated that the fee was small in comparison to revenues and profits. For this reason, conferences would not feel a need to immediately adjust shipping rates. As a result, shipping companies would initially have to absorb the fee. This would not create a problem for Delta. Because the fee is small, it is quite possible that when conferences did attempt to adjust rates to compensate for it, the effect would be masked by other factors.

The user fee would not affect the number of ships Delta operates. The present number of ships is needed to ensure the company can provide on time service.

Although the magnitude of the fee is of little consequence to Delta, the concept is disturbing. The Coast Guard is only one of many Federal agencies that provide service to the U.S. Merchant Marine. If other agencies, principally the U.S. Army Corps of Engineers, also recovered costs through fees, the costs would soon be substantial.

Another more important concern to Delta regarding the fee is fear of retaliation on the part of other countries. Delta feels most countries on its routes would enact

a similar fee in response to the Coast Guard fee. In the process, it is likely that many of the South American nations would exempt each other from the fee. The result to Delta would be 5 or 6 fees as compared to South American vessels paying only one. This would hurt Delta lines. There is little chance of more subsidies to offset this. Primarily for this reason, Delta opposes the user fee and intends to oppose enactment of it.

3. Vital Operating Data

TABLE XVI

Delta Lines Abbreviated Income Statement

	(in millions)		
	<u>1980</u>	<u>1979</u>	<u>1978</u>
Revenues	378.8	274.4	148.3
Expenses:			
Vessel Operating Expenses Net of Operating-Differential Subsidy (less depreciation and charter expenses)	290.9	223.5	--
Vessel Operating Expenses Net of Operating-Differential Subsidy			133.4
Other	47.0	42.1	14.3
Income Before Taxes	40.9	8.8	.6
Return on Investment %	15	3.7	.28

(Source: Delta Company Official)

TABLE XVII
Delta Lines Balance Sheet

(in millions of dollars)			
As of December 31,			
	<u>1980</u>	<u>1979</u>	<u>1978</u>
Assets			
Current assets	72.9	78.8	57.9
Construction fund	50.9	7.9	4.0
Net vessels and equipment	143.8	146.6	153.5
Other	3.9	3.3	2.6
Total	271.5	236.6	218.0
Liabilities			
Current liabilities	76.6	51.9	42.5
L/T liabilities:			
Deferred Income Taxes	9.7	9.0	8.3
Indebtedness payable from			
Capital Construction Fund	62.9	72.0	72.6
Other	20.5	18.8	18.0
Total	169.7	151.7	141.4
Stockholder Equity:			
Common Stock	4.7	4.7	4.7
Paid in Capital	.6	.6	.6
Retained Earnings	100.3	83.4	75.1
Total	105.6	88.7	80.4
Less: Treasury stock	3.8	3.8	3.8
Total Stockholders Equity	101.8	84.9	76.6
Total Liabilities and Equity	271.5	236.6	218.0

(Source: Delta Lines Company Official)

TABLE XVIII

The Delta Lines Fleet 1978 Through 1980

<u>Type</u>	<u>Number</u>	<u>Gross Tons Per Ship</u>	<u>Gross Tons Per Class</u>
LASH	3	32,325	96,975
Breakbulk	3	9,827	29,481
Breakbulk	5	10,396	51,980
Breakbulk	6	9,313	55,878
Breakbulk	3	11,039	33,117
Breakbulk/ Passenger	4	11,221	44,884
Total	24		312,315

(Source: Delta Company Official)

TABLE XIX

Delta Lines Trade Routes 1978 Through 1980

<u>Trade Route</u>	<u>Number of Vessels</u>	<u>ODS Contract Expiration</u>	<u>Number of Annual Voyages</u>
U.S. Atlantic to Panama and South America's West Coast	6	12/31/1997	52
U.S. Atlantic to Venezuela, North Coast Columbia and the Caribbean	3	12/31/1997	43
U.S. Gulf to Central America, Venezuela and the East Coast of South America	3	12/31/1995	26
U.S. Gulf to West Africa	5	12/31/1995	24
U.S. and Canadian Pacific to all of South America	4	12/31/1997	20
U.S. Pacific to Pacific to Pacific Coast Mexico, Central and South America	3	12/31/1997	15

(Source: Delta Company Official)

TABLE XX

Delta Lines Accrued Operating-Differential Subsidies

	(in millions)		
	<u>1980</u>	<u>1979</u>	<u>1978</u>
Total ODS Accruals	337.2	275.0	224.2
ODS Total for Year	62.2	50.8	24.6

TABLE XXI

Annual Fee Costs to Delta Lines

	<u>1980</u>	<u>1979</u>	<u>1978</u>
Estimated Fee (per gross ton)	\$.17	\$.15	\$.15
Total Fee	\$265,468	\$234,236	\$234,236

User Fee as % of:

	<u>1980</u>	<u>1979</u>	<u>1978</u>
	%	%	%
****Revenues	.1	.1	.1
****ODS	.4	.5	.9
****Expenses	.1	.1	.2
****Net Income	.6	2.6	39

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AN ANALYSIS OF THE EFFECTS ON THE PROPOSED COAST GUARD
USER FEE ON THE OCEANGOING US MERCHANT MARINE(U) NAVAL
POSTGRADUATE SCHOOL MONTEREY CA J C PERRY ET AL.

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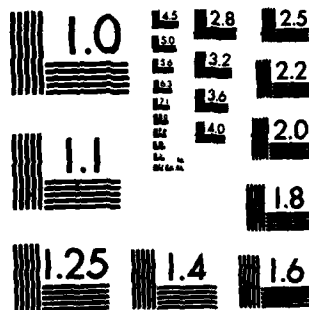
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C. AMERICAN PRESIDENT LINES, LTD.

1. Company Background

American President Lines, Ltd. was originally incorporated in the state of Delaware in August, 1929 as the Dollar Steamship Lines Inc. The present name was adopted in 1938. All of the company's outstanding stock is presently owned by Natomas Transportation Company, which acquired the stock in 1979.

American President Lines (APL) is a United States flag carrier which has operated under government operating differential subsidy since 1938. APL provides scheduled liner services between ports in California, Oregon, and Washington to ports in Japan, Hong Kong, The Philippines, Taiwan, Korea, Thailand, and privilege calls on the U.S.S.R. and China.

Shipments from the United States consist mainly of raw materials and government generated cargos carried throughout the Pacific. Imports consist mainly of manufactured consumer goods (textiles, electronics, etc.). Military generated preference cargo accounts for between 25 to 30 percent of the outbound totals, and only a slightly less percentage of the inbound.

APL operated 17 container, and 5 breakbulk ships on three liner and one tramp trade route systems during the period from 1978 through 1980.

2. Comments by American President Line Official

A senior company official was interviewed in April 1982, concerning the company's views associated with the Coast Guard user fee. The questions listed in chapter V formed the basis for the discussion.

The company official stated that the Coast Guard user fee, as proposed, would not have a significant impact on his company, however he expressed some concern that this fee coupled with other proposed federal agency fees might trigger a retaliation from other foreign governments and could lead into a substantial financial burden. Since the Reagan Administration doesn't like subsidies, the chance of increasing subsidies in response to retaliation is low. He believed the proposed Coast Guard user fee costs would be passed on to the shipping customers in the form of a surcharge to the conference charge list in a way similar to how the fuel surcharges are presently handled. Because of the small size of the fee, however, conferences would not rush to up the freight rates. There is no way APL could get suppliers to help with fee costs. The company must keep the present number of ships in service if it is to maintain its reputation. He further stated that APL was highly influential in the rate setting of the conferences in which it belongs, and credited the intermodal service and APL's reputation for being "dependable and on time" as the reason their customers shipped with them.

American President Lines feels it will remain in business with or without the user fee. The company has plans to replace ships as they wear out. The user fee will probably have little impact on ship buying decisions.

3. Vital Operating Data

TABLE XXII

American President Lines Abbreviated Income Statement

	(in millions)		
	<u>1980</u>	<u>1979</u>	<u>1978</u>
Revenues	576.3	498.6	417.0
Operating-Differential Subsidy	67.5	33.9	26.6
Gain on Disposition of Assets	.5	(4.0)	(.2)
Total Expenses	600.1	470.5	397.2
<u>Net Income Before Taxes</u>	<u>44.2</u>	<u>58.0</u>	<u>46.2</u>
Return on Investment %	7.7	12.7	12.6

(Source: Moody's Transportation Manual 1981)

TABLE XXIII

American President Lines Balance Sheet

(in millions of dollars)

As of December 31,

	<u>1980</u>	<u>1979</u>	<u>1978</u>
<u>Assets</u>			
Current Assets	103.0	107.0	71.5
Capital Construction Fund	72.0	47.8	86.1
Prop. & Equipment	519.5	419.5	358.1
Less: Accum. Depreciation	173.5	146.1	152.5
Other	52.0	26.3	2.8
Total	573.0	454.6	366.3
<u>Liabilities</u>			
Current Liabilities	100.4	113.5	81.9
Long term debt	203.2	125.0	112.3
Other liabilities			
Preferred Stock	---	---	3.3
Common Stock	.1	.1	---
Paid in Capital	9.6	9.6	6.3
Retained Earnings	243.1	198.9	155.9
Total	573.0	454.6	366.3

(Source: Moody's Transportation Manual 1981)

TABLE XXIV

The American President Lines Fleet 1978 Through 1980

<u>Type</u>	<u>Number</u>	<u>Gross Ship Tons</u>	<u>Gross Tons Per Class</u>
Breakbulk	5	15,949	79,745
Container	4	21,467	85,868
Container	4	17,801	71,204
Container	4	16,518	66,072
Container	3	26,990	80,970
Container	2	13,367	26,734
<u>Total</u>	<u>22</u>		<u>410,593</u>

(Source: American President Lines Company Official)

TABLE XXV

American President Lines Trade Routes 1978 through 1980

<u>Trade Route</u>	<u>Number of Vessels</u>	<u>ODS Contract Expiration</u>	<u>Number of Annual Voyages</u>
Wash/Oregon - Far East	4	12/31/1997	26
Trans-Pacific	4	12/31/1997	26
California - Far East	9	12/31/1997	52
Tramp Service	5	n/a	25

(Source: American Preside

TABLE XXVI

APL Accrued Operating-Differential Subsidies

	(in millions)		
	<u>1980</u>	<u>1979</u>	<u>1978</u>
Total ODS Accruals	751.9	684.4	650.5
ODS Total for Year	67.5	33.9	26.6

TABLE XXVII

Annual Fee Costs to APL

	<u>1980</u>	<u>1979</u>	<u>1978</u>
Estimated Fee	\$.17 per GT	\$.15	\$.15
Total Fee	\$349,004	\$307,945	\$307,945
User Fee as % of:			
	%	%	%
****Revenues	.06	.06	.07
****O.D.S.	.52	.91	1.16
****Expenses	.06	.07	.08
****Net Income	.79	.53	.67

D. MOORE-MCCORMACK LINES INC.

1. Background

Moore-McCormack Lines, Inc. is a wholly-owned subsidiary of Moore-McCormack Resources, Inc. Moore-McCormack operates U.S. flag vessels in international trade. All of the firm's vessels are subsidized under the operating-differential subsidy program. The company operates 13 general cargo ships. Outbound from the U.S. the ships principally carry machinery and parts, transportation equipment, chemicals, textiles, textile products, and military cargos. Inbound to the U.S., vessels carry coffee, cocoa, tea and military cargos.

2. Comments by Company Official

A company official of Moore-McCormack Resources was interviewed in April 1982 at the firm's Washington D.C. office. Company views regarding the user fee and the company's place in the ocean shipping marketplace are as follows:

The conferences Moore-McCormack belong to along its South American routes are very effective. This is due to pooling arrangements backed by South American governments. Under these pooling arrangements 40% of the cargo is reserved for South American vessels, 40% goes to U.S. vessels and 20% is available to ships of other nations. Preference cargos are not significant along the South American routes. The user fee costs should be passed along on these routes. Because the fee is small, these costs may not be passed immediately.

Moore-McCormack also provides service to East Africa. The conferences serving these routes are weak and for this reason competition at times approaches the rigorous competition of the charter business. Future prospects for these routes becoming profitable are promising. At present, the ability of Moore-McCormack to pass the user fee costs on along these routes is uncertain due to the competition on these routes.

Moore-McCormack is not opposed to the user fee. The magnitude of the fee is not significant and the concept of

charging users is valid. If a user fee is to be enacted it must be applied in a fair and equitable manner. Commercial operators should not subsidize recreation boaters. Moore-McCormack should remain in business with or without the fee. The company plans to buy more ships as the present ships reach the end of their service life. The user fee would not have a sizable impact on this.

The company is concerned that other nations will enact a user fee in response to a Coast Guard user fee. Moore-McCormack speculates that should other nations develop a fee many would agree not to charge each other. This would put the company at a competitive disadvantage with the foreign flag vessels paying only one fee while Moore-McCormack vessels would be paying several. This would detract from the company's ability to remain in the liner market. Since the Reagan Administration is opposed to subsidies, it is unlikely they will increase them in response to any foreign retaliation.

Moore-McCormack ships make at least five voyages from U.S. ports each year. A user fee would not cause the company to layup any of its ships. All of the ships are needed to meet the demands of the liner business. There is no way Moore-McCormack could pass fee costs on to suppliers.

3. Vital Operating Data

TABLE XXVIII

Moore-McCormack Lines Income Data

	(in millions)		
	<u>1980</u>	<u>1979</u>	<u>1978</u>
Sales and Revenues	177.5	135.1	117.3
Operating Profits	23.4	16.5	16.0
Return on Investment %	23.1	17.6	18.2

(Source: Notes accompanying the consolidated income statement of Moore McCormack Resources Inc. as published in the 1980 annual report.)

TABLE XXIX

Moore-McCormack Lines Balance Sheet Data

	(in millions)		
	<u>1980</u>	<u>1979</u>	<u>1978</u>
Assets	101.2	93.5	87.9
Capital Expenditures	14.8	5.1	.7

(Source: Notes accompanying the consolidated balance sheet of Moore-McCormack Resources Inc. as published in the 1980 annual report.)

TABLE XXX

The Moore-McCormack Lines Fleet 1978 Through 1980

<u>Type</u>	<u>Number</u>	<u>Gross Tons Per Ship</u>	<u>Gross Tons Per Class</u>
Breakbulk	4	10,484	41,936
Breakbulk	5	9,258	46,290
Breakbulk	4	14,001	56,004
Total	13		114,230

(Source: Moore-McCormack Resources Inc. annual report 1980)

TABLE XXXI

Moore-McCormack Trade Routes 1978 Through 1980

<u>Trade Route</u>	<u>Number of Vessels</u>	<u>ODS Contract Expiration</u>	<u>Number of Annual Voyages</u>
U.S. Atlantic to East Coast of South America	6	12/31/1994	52
U.S. Atlantic to South and East Africa	7	12/31/1994	16

(Source: MARAD Annual Report 1980)

TABLE XXXII

Moore-McCormack Lines Accrued
Operating-Differential Subsidies

	(in millions)		
	<u>1980</u>	<u>1979</u>	<u>1978</u>
Total ODS Accruals	571.0	549.2	529.2
ODS Total for Year	21.8	20.0	25.2

TABLE XXXIII

Annual Fee Costs to Moore-McCormack Lines

	<u>1980</u>	<u>1979</u>	<u>1978</u>
Estimated Fee (per gross ton)	\$.17	\$.15	\$.15
Total Fee	\$122,596	\$108,173	\$108,173

User Fee as % of:

	<u>1980</u>	<u>1979</u>	<u>1978</u>
	%	%	%
****Revenues	.1	.1	.1
****ODS	.6	.5	.4
****Operating Profit	.5	.7	.7

E. LYKES BROTHERS STEAMSHIP COMPANY INC.

1. Company Background

Lykes Brothers Steamship Company, Inc. of New Orleans, Louisiana was acquired by the LTV Corporation in December of 1978 and is presently a subsidiary of that firm. Lykes provides service from the U.S. Gulf Coast to most regions in the world. Exports from the United States carried by Lykes' ships consist principally of machinery, vehicles and troop support material. Imports to the United States consist mainly of ores and metals. Preference cargos are a significant portion of the firm's business. All Lykes ships are subsidized under the operating-differential subsidy program.

2. Comments of Company Official

The Washington D.C. office of Lykes Brothers Steamship Company was contacted in April 1982. A representative from this office indicated there was no reason to discuss the Coast Guard user fee with these researchers. Lykes' views had been presented to the Council of American Flag Ship Operators (CASO). The CASO view of the user fee was Lykes' view of the user fee. The representative was unwilling to discuss Lykes operations.

3. Vital Operating Data

Vital operating data and estimates of total fee costs are provided in the following tables. Data for the

firm before 1979 is not available. Balance sheet data was not available for any of the years 1978 through 1980.

TABLE XXXIV

Lykes Brothers Steamship Company Income Data

	(in millions)	
	<u>1980</u>	<u>1979</u>
Revenues	412.8	334.1
Operating Income	35.6	19.8

(Source: From notes to the consolidated income statement of LTV Corporation as published in the 1980 annual report.)

TABLE XXXV

The Lykes Fleet 1979 Through 1980

<u>Type</u>	<u>Number</u>	<u>Gross Tons Per Ship</u>	<u>Gross Tons Per Class</u>
LASH	3	33,350	100,050
Breakbulk/Container	8	9,398	75,184
Breakbulk/Container	12	11,891	142,692
Breakbulk/Container	5	11,500	57,500
Breakbulk/Container	13	11,891	154,583
Container	2	12,600	25,200
Container	1	16,150	16,150
Total	44		571,359

(Source: LTV Corporation Annual Report 1980)

TABLE XXXVI

Lykes Trade Routes 1979 Through 1980

<u>Trade Route</u>	<u>Number of Annual Sailings</u>
U.S. Gulf/U.K.-Continent	21
U.S. Gulf/Mediterranean	49
U.S. Gulf/Far East	9
U.S. Gulf/South and East Africa	28
U.S. Gulf/West Cost South America	28
U.S. West Coast/North Pacific	18
U.S. West Coast/South Pacific	8

(Source: LTV Corporation Annual Report for 1980)

TABLE XXXVII

Lykes Accrued Operating-Differential Subsidies

	(in millions)	
	<u>1980</u>	<u>1979</u>
Total ODS Accruals	887.7	802.2
ODS Total for Year	85.5	74.0

TABLE XXXVIII
Annual Fee Costs to Lykes

	<u>1980</u>	<u>1979</u>
Estimated Fee (per gross ton)	\$.17	\$.15
Total Fee	\$485,655	\$428,519
User Fee as % of:		
	<u>1980</u>	<u>1979</u>
	%	%
****Revenues	.1	.1
****ODS	.5	.6
****Operating Income	1.4	2.2

F. MOORE-MCCORMACK BULK TRANSPORT INC.

1. Company Background

Moore-McCormack Bulk Transport Inc. is a subsidiary of Moore-McCormack Resources Inc. This company operates a fleet of 10 U.S. flag bulk carriers operating on the Great Lakes and three U.S. flag tankers engaged in ocean shipping. The three ocean-going tankers are on seven year charter to the Shell International Petroleum Company Ltd. All three of the vessels receive operating-differential subsidies from the Maritime Administration. The company is also engaged in a liquified natural gas (LNG) shipping project that commenced in 1981. The company constructed two LNG tankers as a result of this project.

Moore-McCormack Bulk Transport entered the ocean tanker business in the early 1970s. At this time Moore-McCormack wanted to sell several unprofitable passenger ships to a foreign company. Since these vessels were constructed under subsidy, approval was required from the Maritime Administration. As part of the approval to sell these ships, Moore-McCormack agreed to construct and operate three U.S. flag tankers in international trade.

2. Comments of Company Officials

An interview was conducted with a representative from Moore-McCormack Resources in April 1982 at the firm's Washington D.C. office. Comments concerning ocean tanker operations are as follows:

Shell Oil Company has mainly been using the tankers as part of the Strategic Petroleum Reserve Project. Cargos carried under this program are preference cargoes.

Under the terms of the charter, Moore-McCormack will be able to pass a user charge on to Shell Oil. In 1980 conditions looked good for rechartering the vessels when the charters expired. At present the outlook is less favorable due to the present over-capacity situation in the tanker market. There is little hope of passing fees on to suppliers.

It is difficult for Moore-McCormack tankers to be used in the domestic trades. As a prerequisite, approval must be obtained from the Maritime Administration. In addition, since these vessels were constructed under subsidy, a

portion of the construction differential subsidy would have to be returned. The poor condition of the tanker market makes these additional costs prohibitive.

Moore-McCormack is not opposed to a user fee as long as it is fairly applied. Commercial operators should not have to subsidize the recreation boater. The company is concerned that other nations will enact a similar fee in retaliation to the Coast Guard user fee. In response, many countries may agree not to charge each other's vessels. This would make it difficult for Moore-McCormack tankers to compete in the tanker markets even with operating-differential subsidies. Since the Reagan Administration is against subsidies, it would be unlikely that the Maritime Administration would increase the scope of the subsidy program to include costs of retaliation.

3. Vital Operating Data

Income data is not available on ocean tanker operations. For this reason a simplifying assumption is made to estimate tanker revenues. This assumption is explained in Table XXXIX. Balance sheet data is not available for ocean shipping operations. It would be difficult to estimate relevant balance sheet items applicable to ocean tanker operations. A table on tanker routes is not provided since the tankers do not necessarily operate along specific routes as do liners. Other data related to ocean tanker operations is provided in Tables XL through XLII.

TABLE XXXIX

Moore-McCormack Bulk Transport Income Data

(in millions)						
	1980		1979		1978	
	<u>Total</u>	<u>Estimate</u>	<u>Total</u>	<u>Estimate</u>	<u>Total</u>	<u>Estimate</u>
Sales and Revenues	57.2	16.3	58.1	16.6	57.8	16.5
Operating Profits	16.0	4.6	14.4	4.1	17.4	5.0

(Source: Notes accompanying the consolidated income statement of Moore McCormack Resources Inc. as published in the 1980 annual report.)

Note: Revenues and operating profit for ocean tankers are not shown separately in the annual report. To develop the estimate the simplifying assumption is made that Great Lakes bulk carriers and ocean tankers produce the same revenues and operating profits per deadweight-ton. Ocean tankers account for approximately 28.5% of the deadweight-tons of the fleet. It is assumed therefore that 28.5% of revenues and profits are attributed to ocean tanker operations.

TABLE XL

The Moore-McCormack Oceangoing Tanker Fleet
1978 Through 1980

<u>Type</u>	<u>Number</u>	<u>Gross Tons Per Ship</u>	<u>Gross Tons for the Class</u>
Tanker	3	22,575	67,725

(Source: Moore-McCormack Company Official)

TABLE XLI

Moore-McCormack Bulk Operating-Differential Subsidies

	(in millions)		
	<u>1980</u>	<u>1979</u>	<u>1978</u>
Total ODS Accruals	21.1	12.3	9.2
ODS Total for Year	8.8	3.1	4.1

TABLE XLII

Annual Fee Costs to Moore-McCormack for Tanker Operations

	<u>1980</u>	<u>1979</u>	<u>1978</u>
Estimated Fee (per gross ton)	\$.17	\$.15	\$.15
Total Fee	\$57,566	\$50,793	\$50,793

User Fee Costs as % of:

	<u>1980</u>	<u>1979</u>	<u>1978</u>
	%	%	%
****Revenues	.4	.3	.3
****ODS	.7	1.6	1.2
****Operating Profit	1.3	1.2	1.0

G. THE BERGER GROUP

1. Background and Comments

A telephone interview was conducted with a representative of the Berger Group in April 1982. The representative

provided a description of the firm and commented on the proposed Coast Guard user fee.

Berger Group with headquarters in Long Island, New York, is a firm engaged in the tanker and bulk carrier business. Subsidiaries of the firm operate a fleet of sixteen U.S. flag tankers and bulk carriers. Vessels are time chartered to Texaco and Amerada Hess. These firms use the vessels in both domestic and international trade as the needs of the companies dictate. Nine of the vessels are operated under operating-differential subsidy.

Berger Group is opposed to the user fee. The company recently renegotiated many of its time charters. The charters run for a period of several years. Company officials have examined the charters and do not believe that the Coast Guard user fee can be passed on to the oil companies. In the present depressed tanker market, the charter revenues barely cover costs. For these reasons, the user fee will be harmful to the Berger Group.

2. Vital Operating Data

The Berger Group is a privately held company. For this reason financial data is not available. Tables follow showing the Berger Group fleet and the estimated annual fee costs for the years 1978 through 1980.

TABLE XLIII

The Berger Group Fleet 1978 Through 1980

<u>Type</u>	<u>Number</u>	<u>Gross Tons Per Ship</u>	<u>Gross Tons Per Class</u>
VLCC	2	139,166	278,332
Tanker	7	44,260	309,820
OBO	2	40,236	80,472
Tanker	1	22,500	22,500
Tanker	4	14,445	57,780
Total	16		748,907

(Source: Berger Group Company Official)

VLCC = Very Large Crude Carrier; OBO = Oil, Bulk, Ore Carrier

TABLE XLIV

Berger Group Accrued Operating-Differential Subsidies

	(in millions)		
	<u>1980</u>	<u>1979</u>	<u>1978</u>
Total ODS Accruals	65.7	47.7	33.5
ODS Total for Year	18.0	14.2	10.0

TABLE XLV

Annual Fee Costs to Berger Group

	<u>1980</u>	<u>1979</u>	<u>1978</u>
Estimated Fee (per gross ton)	\$.17	\$.15	\$.15
Total Fee	\$667,168	\$558,678	\$558,678

H. KEYSTONE SHIPPING COMPANY

1. Background

Keystone Shipping Company of Philadelphia, Pennsylvania operates a fleet of 24 oil tankers and chemical carriers. Most of the company's ships operate in the U.S. domestic trade. Five ships regularly operate in the international bulk trades and receive operating-differential subsidies. In addition to the five regularly subsidized ships, three others occasionally operate in the international trade without subsidy. These vessels are chemical carriers. Keystone Shipping operates its regularly subsidized vessels through two subsidiaries. These subsidiaries are Chestnut Shipping Company and Margate Shipping.

2. Company Comments

A telephone interview was conducted with a representative from Keystone Shipping during April of 1982. Company comments regarding the user fee are as follows:

Keystone Shipping keeps all information regarding its customers and its ability to compete in its markets confidential. The company is very concerned about the user fee. There is perhaps a 50-50 chance of the fee being passed on to its customers. Because of the depressed condition of the tanker markets, the ability of the company to survive should the fee be enacted is questionable. Keystone opposes the Coast Guard user fee.

3. Vital Operating Data

Keystone Shipping is a privately held company. For this reason, financial data is not made public. The following tables show the Keystone fleet, operating-differential subsidies received, and estimate of total fee costs for the Chestnut Shipping and Margate Shipping subsidies.

TABLE XLVI

The Keystone Fleet 1978 through 1980

<u>Type</u>	<u>Number</u>	<u>Gross Tons Per Ship</u>	<u>Gross Tons Per Class</u>
Regularly Subsidized:			
Tanker	3	22,357	67,071
Tanker	2	44,875	89,750
Occasional International Trade Unsubsidized:			
Tanker	1	14,445	14,445
Tanker	1	16,376	16,376
Tanker	1	20,572	20,572
Total	8		208,214

(Source: Keystone Company Official)

TABLE XLVII

Keystone Accrued Operating-Differential Subsidies

	(in millions)		
	<u>1980</u>	<u>1979</u>	<u>1978</u>
Total ODS Accruals	42.7	32.7	20.8
ODS Total For Year	20.0	11.9	7.9

TABLE XLVIII

Annual Fee Costs to Keystone

	<u>1980</u>	<u>1979</u>	<u>1978</u>
Estimated Fee (per gross ton)	\$.17	\$.15	\$.15
Total Fee	\$176,982	\$156,160	\$156,160

Note: Estimated fee costs assume a total of 8 vessels making at least 5 trips per year from U.S. ports.

I. SEA-LAND SERVICES INC.

1. Background

Sea-Land Services, Inc. is a wholly owned subsidiary of R. J. Reynolds Industries, Inc. It is a United States flag carrier which provides scheduled containership services to approximately 120 ports or places in more than 50 countries, including U.S. ports on the Atlantic, Gulf of Mexico, and Pacific coasts. At present, Sea-Land's most important trade routes are between the U.S. and Europe, the Mediterranean, and the Far East. Sea-Land also provides a limited coastal U.S. service between the continental U.S. and Alaska. The coastal service is not going to be considered in the case study.

Shipments from the United States consist mainly of raw materials and government generated cargos. Imports consist mainly of manufactured consumer goods. Government

generated preference cargo (military included) account for approximately one fourth of the total.

Sea-Land operated 28 containerships on four foreign transocean routes during the period 1978 to 1980. Sea-Land does not partake in the U.S. government subsidy program.

2. Comments of Sea-Land Company Official

A Sea-Land company official from the Oakland, California office was interviewed in April 1982, concerning the company's views associated with the Coast Guard user fee. The questions listed in chapter VII formed the basis for the discussion.

The Sea-Land official felt that his company was the best of the American flag shipping companies and had attained this position in spite of not being U.S. government subsidized. This was attributed to the fact that they are a very aggressive, competitive organization, and offer the best and most on-time transportation service available. During the 1978-1980 period, the S1 7 class containerships formed the backbone of the Sea-Land fleet. These most advanced vessels were capable of steaming at 33 knots, which gave them the capability to regain lost time by speeding up whenever there had been an unforeseen delay (i.e. storm, canal blockage, etc.). For this reason, Sea-Land has built a reputation for reliability and punctuality which is most important to shippers having vast sums of money riding in the goods being shipped.

Sea-Land's profit margin has suffered since the runaway escalation of fuel costs which peaked in 1979. Their high speed ships required more fuel than most of their competition's slower ships. The increased fuel costs were passed on to the shippers in the form of conference rate fuel surcharges, which helped some, but was not enough to offset the full amount. Sea-Land has recently sold its S1 7s to the U.S. government and purchased 12 new D-9 class containerships which are diesel powered and very economical. They are hoping that these ships will provide them with the competitive edge in which they have enjoyed in the past.

The Sea-Land official said that he had done some quick calculations with the proposed Coast Guard user fee (\$.20 per gross ton / per U.S. port entry / 5 max per year per ship) and that he believed the fee, by itself, would not affect his company adversely, however he considered it to be just the tip of the iceberg. He expressed concern about the industry being confronted with other user fees for all the other government agencies (including state and local) that have a working concern or provide services to the shipping business. He also predicted that there would be foreign government retaliation resulting from any U.S. government user fee program which, in effect, could double or more the total fees.

If the Coast Guard user fee program is enacted, he believed the costs would be passed onto the shippers by

surcharge to the conference price index. Because of the small size of the fee costs this could be handled as a matter of routine. Sea-Land may have to absorb the costs for some time until the conferences react. There is no way the costs could be passed on to the suppliers such as the labor unions. As far as the increased cost's effect on the demand for the products shipped, he didn't think it would do anything, but he did state that the effect would be felt on the imported products before being felt on the exported raw materials.

He had no concern that the fee, as proposed, would have any effect on the size or shape of Sea-Land's fleet or on their ability to continue in business now or in the future. Because of the small size of the fee, it would have no impact on decisions to replace ships as they reached the end of their service life. The present number of ships is needed to ensure good service is maintained on the ocean routes.

3. Vital Operating Data

TABLE XLIX

Sea-Land Services Abbreviated Income Statement

	(in millions)		
	<u>1980</u>	<u>1979</u>	<u>1978</u>
Revenues	1413.7	1220.4	1103.7
Operating-Differential Subsidy	00.0	00.0	00.0
Total Expenses	1347.9	1162.1	985.0
<u>Net Income Before Taxes</u>	<u>65.8</u>	<u>58.3</u>	<u>118.7</u>
Return on Investment %	3.9	4.1	9.7

(Source: Sea-Land Industries Investments Brochure 1980)

TABLE L

Other Sea-Land Services Business Data

	(in millions of dollars)		
	As of December 31,		
	<u>1980</u>	<u>1979</u>	<u>1978</u>
<u>Assets</u>	<u>1689.9</u>	<u>1431.1</u>	<u>1227.9</u>
Capital Expenditures	381.4	275.7	163.1
Depreciation, Depletion and Amortization Expense	102.7	94.2	89.5
Cash Flow from Operations	209.3	148.6	166.1

(Source: R. J. Reynolds Industries 1980 Annual Report)

TABLE LI

The Sea-Land Services Non-Coastal Fleet 1978 Through 1980

<u>Type</u>	<u>Number</u>	<u>Gross Ship Tons</u>	<u>Gross Tons Per Class</u>
Container	4	11,389	45,556
Container	2	11,601	23,202
Container	6	18,024	108,144
Container	4	24,774	99,096
Container	8	41,127	329,016
Container	4	17,376	69,504
<u>Total</u>	<u>28</u>		<u>674,518</u>

(Source: Sea-Land Services Company Official)

TABLE LII

Sea-Land Services Foreign Trade Routes 1978 Through 1980

<u>Trade Route</u>	<u>Number of Vessels</u>	<u>Type of Vessels</u>	<u>Number of Annual Voyages</u>
Trans Pacific	4	Sl 7	52
North Atlantic	4	Sl 7	52
Gulf of Mexico-North Europe	8	Sl 18 & D 6	52
Caribbean Service	12	CJ4, C4X, & T2	52

(Source: Sea-Land Company Official)

TABLE LIII

Annual Fee Costs to Sea-Land

	<u>1980</u>	<u>1979</u>	<u>1978</u>
Estimated Fee	\$.17 per GT	\$.15	\$.15
Total Fee	\$573,340	\$505,889	\$505,889
User Fee Costs as % of:			
	<u>%</u>	<u>%</u>	<u>%</u>
****Revenues	.04	.04	.05
****Expenses	.04	.04	.05
****Net Income	.87	.87	.43

J. AMERICAN INSTITUTE OF MERCHANT SHIPPING

The American Institute of Merchant Shipping or AIMS, is a trade association that represents U.S. flag tanker operators. Most of AIMS members operate tankers in the domestic trade, however, one of its firms does operate tankers in the foreign trades. AIMS maintains its office in Washington D.C. The primary purpose of the organization is to lobby for legislation affecting the U.S. tanker industry.

A representative from AIMS was interviewed in April 1982 at the organization's Washington D.C. office. Comments regarding the Coast Guard user fee are as follows:

Most tanker operators will eventually be able to pass on the user fee to its customers. AIMS members face market conditions that approach perfect competition. For this

reason tanker rates vary widely as the demand for shipping changes. The terms and conditions of most time charters would allow this fee to be passed on to shippers. The representative was told of a comment made by a Berger Group Official that Berger charters prevented the firm from passing the fee on to charterers. The AIMS representative was skeptical about this comment. She did say, however, it may be difficult to pass on the fee when current charters expire due to the depressed condition of the tanker market. Eventually, however, the fees will be passed on. Berger Group is not a member of AIMS.

AIMS is opposed to the Coast Guard user fee. Coast Guard costs must be allocated based on some view of use of Coast Guard services. At best, this allocation is an arbitrary process that is difficult to defend. Other marine user groups also feel this way. AIMS does not feel the Coast Guard user fee has much chance of becoming law.

K. COUNCIL OF AMERICAN-FLAG SHIP OPERATORS

The Council of American-Flag Ship Operators or CASO is a trade association that represents U.S. flag operators of subsidized liners. CASO members include Delta Lines, Moore-McCormack and Lykes. The primary purpose of CASO is to lobby for legislation affecting U.S. subsidized lines.

A Coast Guard user fee would be difficult for some firms to absorb at this time. The conferences serving the Pacific

are in disarray at this time. Pacific freight rates are, as a result, depressed.

CASO is concerned about possible retaliation on the part of some countries should a Coast Guard user fee be enacted. Many third world nations are always looking for the opportunity to institute a new tax. Coast Guard user fees would present such an opportunity. In the process of enacting a user fee, third world nations may very likely arrange to avoid charging nations that allowed their vessels to pass for free. For this reason, the typical U.S. liner would face five or six fees where foreign flag vessels may only pay once.

Should other nations exempt each other from their own user fees, U.S. vessels would be at a disadvantage. The industry sees little hope for making up this disadvantage in the form of higher subsidies from the federal government. The Reagan administration is opposed to the idea of subsidies. There is currently a freeze on new operating-differential subsidies. The industry is concerned that the Reagan administration may take action to eliminate subsidies altogether.

CASO indicated there is little hope of the industry passing the user fee costs on to suppliers such as oil companies or labor unions. High labor and shipyard costs are one reason most of the industry is subsidized.

IX. ANALYSIS OF CASE STUDIES

A. INTRODUCTION

The purpose of this chapter is to analyze the data presented in chapter VIII. The analysis seeks to identify patterns in the effect of the proposed fee on financial data and in the comments of company officials. Financial data and comments are contrasted and compared. Information from the case studies also is contrasted and compared with the description of the ocean shipping marketplace of chapter V and the history of the Merchant Marine presented in chapter II.

As discussed in chapter V and VIII, there are significant differences in the liner trades and the bulk charter trades. For this reason, a separate analysis is provided for each. The analysis begins however with a description of their similarities.

B. GENERAL

There are several patterns in the case studies common to both the liner and bulk trades. First, with the exception of the Moore-McCormack companies, all of the firms are adamantly opposed to the fee. Outside of economic and financial considerations discussed later in this chapter, this comes as no surprise. As discussed in chapter II, most Coast

Guard services have been provided to the Merchant Marine free of charge for well over one hundred years. The Reagan Administration seeks to reduce inefficiencies and inequities attributed to government that have evolved over the past 40 years. The Coast Guard was providing services free of charge to the Merchant Marine long before big government arrived in Washington, D.C.

Secondly, ability to deal with user fee costs is independent of company size, fleet size, corporate structure and location of corporate headquarters. The primary factor in ability to deal with the user fee is the type of trade. Liners seem to be able to absorb or pass the fee on while bulk carriers appear to have problems absorbing or passing on the fee. Differences in ability to absorb or pass the fee on is discussed later in this chapter.

In chapter VI, it was shown that the user fee for ad-measurement, initial inspection, and certification increases dramatically for vessels over 300 gross tons. From the case studies it can be readily observed that vessel size is much greater than 300 gross tons. The smallest vessels in international trade are 9,000 gross tons. Based on comments of many company officials, older vessels are generally replaced by larger vessels. This is consistent with the history of the Merchant Marine presented in chapter II. For these reasons, it appears the fee structure will not influence decision-making regarding vessel size.

Several company officials commented that their firm would be unable to pass the fee on to suppliers. This statement is consistent with the history of the Merchant Marine and the discussion provided in chapter III regarding the subsidy programs. As discussed in these chapters, labor, shipyards, and suppliers will not lower prices to allow U.S. vessels to compete in international trade. High labor and shipyard costs have been a problem for the U.S. Merchant Marine since the days of the clipper ships. The high costs associated with these factors of production have historically made it difficult for this industry to compete in international trade.

C. THE LINER TRADE

Perhaps the most striking aspect of liner case study financial data is the magnitude of estimated fee costs. In all cases, the fee is small in relation to revenues and profits. User fee costs are .1% or less of total revenues in all instances. Similarly, fee costs are small (1-2% or less) in relation to profits. During this period Delta Lines had several off years in which user fee costs reached 39% of operating profits. A Delta company official indicated however, that this was an unusual year. For Delta fee costs represent only 1% - 2% of profits in what is considered a normal year.

Comments of company officials are in agreement with the financial data. All indicated that the proposed fee represented costs that would be relatively minor in relation to revenues and other costs. If the company had to absorb the fee costs, it would not create a problem.

All the liner companies and their trade association indicated that the prospects for remaining in business over the next 5 to 10 years look favorable. This comment applies with or without a Coast Guard user fee. These comments are adequately supported by balance sheet data.

For Delta Lines and American President Lines (APL), complete balance sheet data is available. From 1978 through 1980 APL assets increased from \$218.0 million in 1978 to \$271.5 million in 1980 or approximately 56%. The ratio of debt to equity remained constant during the period at approximately 1.1. Delta Line's assets increased from \$366.3 million in 1978 to \$573.0 million in 1980 or approximately 24%. During this period the ratio of debt to equity decreased from approximately 1.8 to 1.6.

For Sea-Land Services and Moore-McCormack Lines, complete balance sheet data is not available. Sea-Land assets increased from \$1,227.9 million in 1978 to \$1,689.9 million in 1980 or approximately 38%. Moore-McCormack Line's assets increased from \$87.9 million in 1978 to \$101.2 million in 1980 or approximately 15%. Information on debt is not available for these companies.

As indicated in chapter VIII, balance sheet data is not available on Lykes Bros. Steamship Company.

All of the firms experienced real growth in revenues during the period 1978 through 1980. As shown in Table LIV, revenue increase varied among firms from a low of 24% to a high of 155% (3% to 106% when adjusted for inflation) for the period.

Table LV is a summary of the ratio of income before taxes to assets developed in chapter VIII. For the three subsidized firms, return on assets averages approximately 15%. The average return on assets was calculated by summing the return on assets for each company for each year and dividing by the number of returns on assets used to get the sum. The returns on assets for Delta Lines for 1978 and 1979 were not used since a company official indicated these were abnormal years.

For Sea-Land Services, the one unsubsidized line, return on assets shows a steady decline for the three year period.

Using the Standard's and Poor's Industrial Survey for 1981 and Moody's Transportation Manual 1981, the ratio of income before taxes to assets was determined for several transportation industries other than ocean shipping. The ratio for three of these industries is shown in Table LVI. Comparing the rate of return on assets of these industries to the U.S. liner trade one can observe that except for Sea-Land Services, return on assets in the liner trade is above

TABLE LIV

Increase in Liner Revenues for 1980 as Compared with 1978

	<u>Straight %</u>	<u>Adjusted %</u>
American President Lines	38.2%	12%
Delta Lines	155.0	106
Lykes Brothers*	23.5	11
Moore-McCormack	51.3	23
Sea-Land Services	28.0	3

*Represents increase from 1979 to 1980 only.

Increase in revenue is calculated from income statement tables presented in chapter VIII. The difference in revenues from 1978 to 1980 is calculated as a percentage of revenues for 1978 to produce this table. Straight % refers to the increase in revenues without adjusting for inflation. Adjusted % is the increase in revenues after adjusting 1978 revenues to constant dollars for 1980 using the GNP deflator.

TABLE LV

Liner Company Return on Assets 1978 Through 1980

	<u>1980</u>	<u>1979</u>	<u>1978</u>
American President Lines	7.7%	12.7%	12.6%
Delta Lines	15.0%	3.7%	.3%
Moore-McCormack Lines	23.1%	17.6%	18.2%
Sea-Land Services	3.9%	4.1%	9.7%

This table is a summary of the ratios of income before taxes to assets calculated for liner companies in chapter VIII.

average in comparison to other transportation industries.

Data concerning return on assets for water transportation as a whole is not available.

TABLE LVI

Return on Assets for Selected Transportation Industries

	<u>1980</u>	<u>1979</u>	<u>1978</u>
Airlines; freight	.9%	6.7%	18%
Trucking	13%	17%	22%
Railroads	---	3%	2%

As shown in the tables of chapter VIII, the number of ships in the company fleets remained stable during the period 1978 through 1980. Most company officials indicated the company had capital budget plans that called for the replacement of ships as they reached the end of the service life. Financial data indicate these plans are plausible. Because of the small costs of the Coast Guard user fee, most companies indicated this would not be a serious consideration in the decision to buy ships. This statement is corroborated by the analysis of the magnitude of the user fee presented earlier in this section.

All companies indicated that ships would not be taken out of service as a result of the user fee. In the immediate future the present number of ships is needed to meet liner schedules. These comments are consistent with the description

of the liner trades presented in chapter V. Over the next five to ten years some firms indicated that the number of ships will be reduced as older ships are replaced with larger ships. This is consistent with the history of the Merchant Marine which has consistently witnessed smaller ships replaced with larger ships and thus reducing the total number of ships in service.

Ability to pass the fee on is a function of the trade routes. On profitable routes where shipping conferences are strong, steamship companies will be able to pass the user fee on to shippers. On routes where conferences are weak, officials indicated that the fee would probably be passed on, however there was considerable uncertainty regarding this. These comments harmonize with the descriptions of the liner trade presented in chapter V. In addition, these comments are supported by conference rate schedules examined by these researchers. Conference rate schedules were examined at steamship company offices and at the Federal Maritime Commission Office located in Washington D.C. The rate schedules contained many amendments that specified freight rate increases due to increased fuel costs. Rate schedules are large bound documents that specify rates for thousands of different commodities. It is impractical to reproduce even parts of these documents in this thesis. Increased costs due to a user fee appears to be an analogous situation.

All company officials indicated that because of the small magnitude of the fee costs, conferences would not rush to raise rates. Conference members meet at regular intervals to discuss and set rates. The user fee costs would be handled as a routine matter. For this reason, steamship companies would have to absorb fee costs for some period of time once the fee was enacted. Because the fee costs are small it is possible that effects of the fee would be masked by other factors such as changes in fuel prices. The estimated fee costs and the description of the liner trade support these comments.

All officials interviewed stated the Coast Guard fee was just the "tip of the iceberg" of a series of fees that are being considered. Officials stated the U.S. Army Corps of Engineers are considering a user fee as are some local governments. Although the magnitude of the Coast Guard fee is small, a Corps of Engineers fee for dredging services and a set of local user fees could easily result in total fee costs that are double or triple the cost of the Coast Guard fee. These researchers were able to confirm these plans for Corps of Engineers and local government fees with Coast Guard officials in Washington D.C.

In addition to user fees from other government agencies in the U.S., officials were concerned with what they termed "retaliation" on the part of other countries. All those interviewed maintained that most foreign governments would

enact a user fee in response to any fee enacted by the U.S. government. In the process of enacting such a fee, many countries would agree not to charge each other's ships. Conferences would be reluctant to pass these costs on since only American ships would be subject to the fee. This would put U.S. ships at a competitive disadvantage. U.S. ships would be paying the fee in each country along the trade route while ships of other countries would only pay in the United States. American steamship companies would therefore have to absorb these costs which would be several times of what the fee would be under the Coast Guard's proposal. Because of the Reagan Administration's distaste for subsidies, steamship companies indicated they did not expect help from the federal government in the form of higher operating-differential subsidies. These thesis researchers were able to confirm the statements regarding subsidies with a Maritime Administration official. The Reagan Administration has mandated a freeze on further subsidies. Statements of company officials regarding ability to pass fees on or absorb them as a result of retaliation are not adequately supported by other aspects of this thesis. However, in chapter V it was found that U.S. companies are able to exert considerable influence along many of their routes due to preference cargos. Foreign flag operators generally go along with American rates provided the trade is not strangled. To apply this concept, one can consider a situation where U.S. firms pay a

fee 10 times the estimated Coast Guard fee. As indicated earlier in this section, fee costs as a percentage of total revenues is less than .1% in all cases. A fee 10 times as great would only account for 1% of revenues. A 1% increase in charges to customers does not appear to have the capability to strangle the trade.

Carrying this analysis further one can estimate what 10 times the Coast Guard fee costs would do if the fee had to be absorbed. Earlier in this section it was stated that Coast Guard fee costs generally represented up to 2% of company profits. A fee 10 times as great would represent 10 to 20% of company profits. It is not clear if this would be difficult for companies to absorb.

It was not possible to confirm the possibility of retaliation in the event of a Coast Guard fee. Research into the possibility of retaliation is beyond the scope of this thesis.

D. U.S. BULK CHARTER TRADE

All company officials indicated the proposed Coast Guard user fee would create financial problems for their company. Terms and conditions of charter contracts and a depressed charter market are factors that make the user fee a problem for this industry.

The Berger Group representative indicated that the terms and conditions of the firm's charters prevented the company

from passing fee costs on to customers. No additional data provided by the Berger Group served to support or refute this comment. A representative from the American Institute of Merchant Shipping (AIMS) indicated that the terms and conditions of most charters did allow fees to be passed on to the charterers. She was somewhat incredulous when informed of the Berger Group's comment. AIMS is a trade association that represents U.S. flag bulk and tanker operators. It is interesting to note however that the Berger Group is not a member of AIMS.

Keystone Shipping indicated there was a 50/50 chance of passing the fee on to customers. Moore-McCormack indicated that the terms and conditions of the present time charters allowed fees to be passed on to the charterer. The researchers were unable to confirm these comments from other sources.

All of the officials interviewed spoke of the overcapacity situation in the bulk carrier trade. In an overcapacity situation, operators are unable to cover fixed costs. Overcapacity often forces shipowners to take ships out of service. The user fee represents additional fixed costs since all ships sail at least 5 times a year from U.S. ports. Additional fixed costs serve to aggravate the overcapacity problem. These comments are supported by the description of the charter trade provided in chapter V.

These researchers were unable to verify the overcapacity situation with quantitative data. Such an attempt is beyond

the scope of this thesis. Lane Kendall, a noted expert in maritime affairs, did however confirm the overcapacity situation for these researchers in an interview in April 1982.

Two of the firms indicated that the magnitude of fee costs would be harmful. Financial data was not provided by the Berger Group and Keystone Shipping to verify these comments.

For Moore-McCormack Bulk Transport, estimates of ocean bulk operations show that fee costs are .4% or less of total revenues and 1.3% or less of operating profits. The company official indicated that during the period 1978 through 1980 these charges would have been passed on and would be considered small. The depressed condition of the market now makes these charges significant. When present time charters expire, it will be difficult to negotiate charters that will cover costs: The user fee will aggravate this situation.

All of the companies spoke of possible retaliation on the part of other countries in response to other fees enacted by the U.S. government. Officials indicated that if the Coast Guard fee didn't force them out of the business, fees from other countries would. It was not possible to ascertain whether Keystone or Berger Group would be forced out of business.

E. SUMMARY

Financial data and comments of company officials have been compared and contrasted. In addition the history of the Merchant Marine and the theories concerning the ocean shipping market place have been applied to the case studies. In the next section we will draw some conclusions as to the impact of the proposed Coast Guard user fee on the U.S. Merchant Marine engaged in international trade.

X. CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS

To this point an analysis has been provided on the effects the proposed Coast Guard user fee will have on the U.S. Merchant Marine engaged in international trade. The analysis has included quantitative data such as financial statements as well as qualitative factors such as the history of the U.S. Merchant Marine. The analysis has concentrated on the effects the fee will have on the profitability of the firms. Conclusions will now be made from this analysis as to how the fee will affect the number of firms and the number of ships engaged in the trade.

It is concluded from this research effort that the number of firms and ships in the liner trades will not be affected by the Coast Guard user fee. Liner vessels represent over 80% of U.S. vessels engaged in international trade. The primary reason for this conclusion is the magnitude of fee costs. Fee costs are small in relation to revenues and profits and therefore should not affect decision-making in the industry.

On most trade routes fee costs will be passed to shippers. If necessary, conferences can adjust fee related freight increases to ensure all current customers continue to have a competitive product in their overseas markets. It

is very possible the user fee related increase will be masked by other factors such as fuel price changes. On some trade routes where conferences are weak, the fee cost may have to be absorbed. This will not eliminate firms from providing service along these routes. The U.S. bulk charter trade is currently struggling with an overcapacity situation. For this reason, the additional fixed costs represented by a user fee will make the overcapacity problem more difficult to deal with. It is unclear whether the user fee will decrease the number of firms and ships engaged in the bulk trade. This is as much a function of the overcapacity problem as it is the user fee.

B. RECOMMENDATIONS

This thesis uncovered several issues that should be researched prior to enacting a user fee. First, research is needed to study the possibility of retaliation as a result of enactment of a user fee. Retaliation refers to a situation where other countries would enact a fee in response to a Coast Guard user fee. The possibility of retaliation bears some serious consequences for the U.S. Merchant Marine.

Secondly, additional research is needed into the cost of the user fee in relation to profitability in the bulk charter trade. Insufficient data was available to properly assess the situation. The data is available at the Maritime Administration but could not be released to this research team.

The federal government has spent millions of dollars to support a bulk charter trade. It is possible these efforts will be undermined by a user fee.

Finally, research should be conducted into the possibility of deferring user fee payments during bad years. The bulk charter industry clearly has widely varying business cycles. This is also evident to a lesser degree in the liner trades. Deferred payments may ease the burden of the fee on the industry.

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